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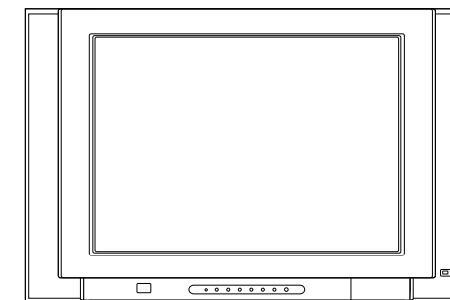
# COLOR TV SERVICE MANUAL

CHASSIS : MC-017A

**MODEL:RE/RL-29FA31PX  
RE/RL-29FA33X/PX**

## CAUTION

BEFORE SERVICING THE CHASSIS,  
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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# SAFETY PRECAUTIONS

## IMPORTANT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by  $\Delta$  in the Schematic Diagram and Replacement Parts List.

It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent X-RADIATION, Shock, Fire, or other Hazards.

Do not modify the original design without permission of manufacturer.

### General Guidance

An **Isolation Transformer** should always be used during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and its components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this TV receiver is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube**. Do not lift the Picture tube by its Neck.

### X-RAY Radiation

#### Warning:

The source of X-RAY RADIATION in this TV receiver is the High Voltage Section and the Picture Tube. For continued X-RAY RADIATION protection, the replacement tube must be the same type tube as specified in the Replacement Parts List.

To determine the presence of high voltage, use an accurate high impedance HV meter.

Adjust brightness, color, contrast controls to minimum.

Measure the high voltage.

The meter reading should indicate

23.5 ; 15KV: 14-19 inch, 26 ; 15KV: 19-21 inch,

29.0 ; 15KV: 25-29 inch, 30.0 ; 15KV: 32 inch

If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.

### Before returning the receiver to the customer,

always perform an **AC leakage current check** on the exposed metallic parts of the cabinet, such as antennas, terminals, etc., to be sure the set is safe to operate without damage of electrical shock.

#### Leakage Current Cold Check(Antenna Cold Check)

With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.

If the exposed metallic part has a return path to the chassis, the measured resistance should be between  $1M\Omega$  and  $5.2M\Omega$ .

When the exposed metal has no return path to the chassis the reading must be infinite.

An other abnormality exists that must be corrected before the receiver is returned to the customer.

#### Leakage Current Hot Check (See below Figure)

Plug the AC cord directly into the AC outlet.

**Do not use a line Isolation Transformer during this check.**

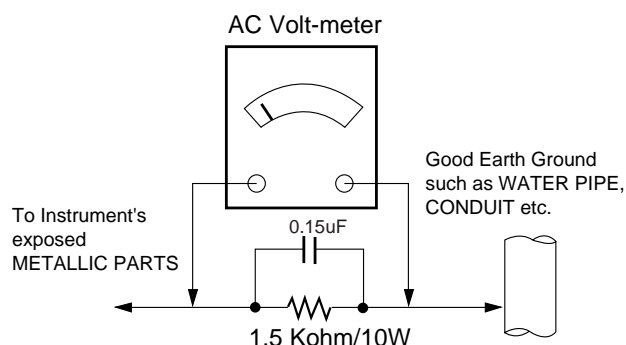
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity.

Reverse plug the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS which corresponds to 0.5mA.

In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.

#### Leakage Current Hot Check circuit



# SPECIFICATIONS

**Note :** Specification and others are subject to change without notice for improvement.

- **Video input system:**

PAL-B/G, D/K, I/I  
SECAM-B/G, D/K/L/L'  
NTSC M  
NTSC 4.43(AV)

SOUND IF : 33.4MHz (B/G)  
32.9MHz (I/I)  
32.4MHz (D/K,L)  
34.4MHz (M)  
40.4MHz (L')

- **Intermediate Frequency (Unit : MHz)**

VISION IF : 38.9MHz,33.9MHz(SECAM-L')  
COLOR IF : 34.47MHz(4.43)  
35.32MHz(3.58) : NTSC-M  
( VIF-4.25000MHz ): SECAM  
VIF-4.40625MHz

- **Power requirement :** 110~240V, 50/60Hz

- **Power consumption :** 1Max 155W

- **CPT :** Flat CPT

- **Tuning range**

Band	For TV				For CATV
	B/G	D/K	I/I	NTSC	
VHF-Low	Ch2-4	Ch1-5		Ch2-13	S1'-S3', S1
VHF-High	Ch5-12	Ch6-12	Ch4-13		S2-S10, S11-S20
Hyper					S21-S41
UHF	Ch21-69			Ch14-69	

- **Tuning system :**

FVS  
100 Programme memory

- **Antenna input impedance :** VHF/UHF 75 ohm, unbalanced

- **OSD (On Screen Display) :** EZ MENU Type

- **Voice coil impedance :** 8 ohm

- **Sound output :** 10W

- **External connection :**

AV Input: 3 (side or front,rear)  
Component Input: 1 (rear option)  
PERI TV Connector: Full Scart,AV Input or Scart(option)  
R,G,B Input: AV-1

- **Feature :** Auto programme/Manual programme

SVM (Scanning Velocity Modulation)  
Digital Eye  
Digital Comb Filter  
Auto Sleep  
Dynamic Focus  
Programme Editing  
PSM (Picture Status Memory)  
SSM (Sound Status Memory)  
CTI  
Teletext (8 page)  
Turbo Search, Picture & Sound  
ACMS  
ARC (Zoom 1/ZOOM 2, 16:9 <-> 4:3)  
2 TUNER PIP(Double Window PIP)

- **External In/Output**

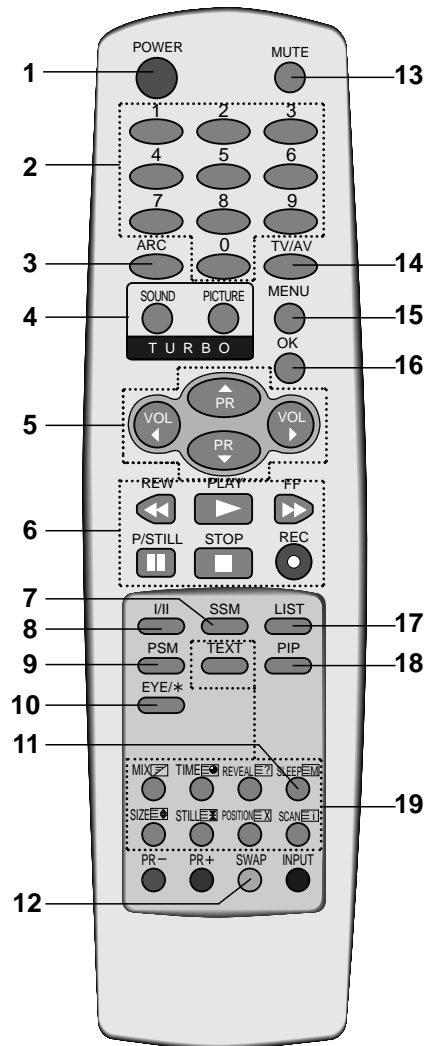
Audio-In:0.5Vrms±3db, over 10Kohm  
Audio-Out:0.5Vrms±3db, below 1Kohm  
Video-In/Out:1Vp-p±3db, 75ohm  
R,G,B In:0.7Vp-p±3db

# DESCRIPTION OF CONTROLS

All the functions can be controlled with the remote control handset. Some functions can also be adjusted with the buttons on the front panel of the set.

## Remote control handset

Before you use the remote control handset, please install the batteries. See the next page.



1. **POWER**  
switches the set on from standby or off to standby.
2. **NUMBER BUTTONS**  
switches the set on from standby or directly select a number.
3. **ARC (Aspect Ratio Control)**  
changes the picture format.
4. **TURBO PICTURE BUTTON**  
selects Turbo picture.
5. **▲ / ▼ (Programme Up/Down)**  
selects a programme or a menu item.  
switches the set on from standby.  
**◀ / ▶ (Volume Up/Down)**  
adjusts the volume.  
adjusts menu settings.
6. **VCR BUTTONS**  
control a LG video cassette recorder.
7. **SSM (Sound Status Memory)**  
recalls your preferred sound setting.
8. **I/I**  
selects the language during dual language broadcast.  
selects the sound output (option).
9. **PSM (Picture Status Memory)**  
recalls your preferred picture setting.
10. **EYE/\***  
switches the eye function on or off.
11. **SLEEP**  
sets the sleep timer.
12. **SWAP**  
returns to the previously viewed programme.
13. **POWER**  
switches the set on from standby or off to standby.
14. **ARC (Aspect Ratio Control)**  
changes the picture format.
15. **MENU**  
selects menu settings.
16. **TURBO PICTURE BUTTON**  
selects Turbo picture.
17. **SSM (Sound Status Memory)**  
recalls your preferred sound setting.
18. **PIP**  
selects picture in picture.
19. **SLEEP**  
sets the sleep timer.

### 13. MUTE

switches the sound on or off.

### 14. TV/AV

selects TV or AV mode.

clears the menu / text from the screen.

switches the set on from standby.

### 15. MENU

selects a menu.

### 16. OK

accepts your selection or displays the current mode.

### 17. LIST

displays the programme table.

### 18. PIP BUTTONS

#### PIP

switches the sub picture on or off.

#### PR +/-

selects a programme for the sub picture.

#### SWAP

alternates between main and sub picture.

#### INPUT

selects the input mode for the sub picture.

#### SIZE

adjusts the sub picture size.

#### STILL

freezes motion of the sub picture.

#### POSITION

relocates the sub picture in clockwise direction.

#### SCAN

switches on or off the programme scan mode through 4 sub pictures.

### 19. TELETEXT BUTTONS

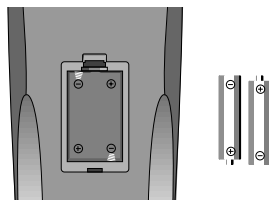
These buttons are used for teletext.

For further details, see the 'Teletext' section.

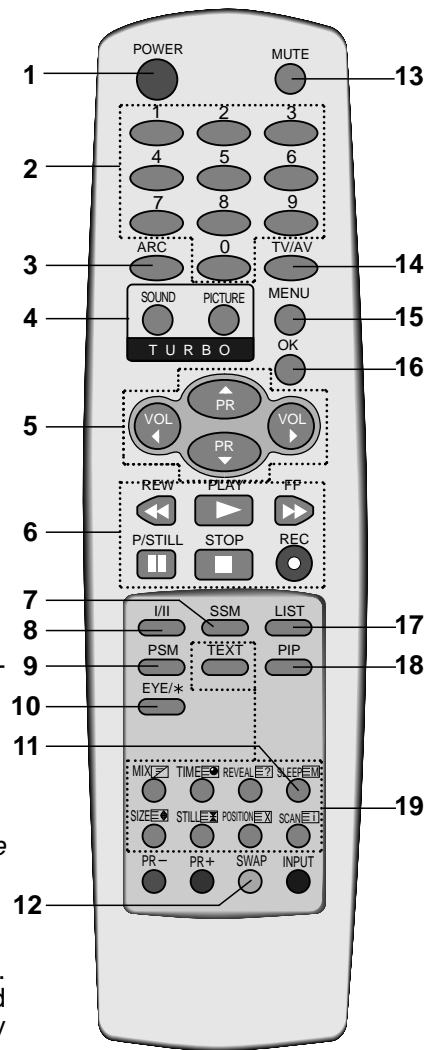
**Note :** In teletext mode, the **PR +/-**, **SWAP** and **INPUT** buttons are used for teletext function.

## Battery installation

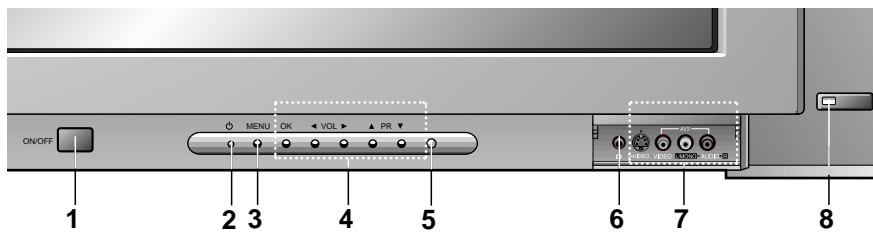
The remote control handset is powered by two AAA type batteries. To load the batteries, turn the remote control handset over and open the battery compartment. Install two batteries as indicated by the polarity symbols (+ and -) marked inside the compartment.



**Note :** To avoid damage from possible battery leakage, remove the batteries if you do not plan to use the remote control handset for an extended period of time.



## Front panel



1. **MAIN POWER**  
switches the set on or off.
2. **POWER/STANDBY INDICATOR**  
illuminates brightly when the set is in standby mode.  
dims when the set is switched on.
3. **MENU**  
selects a menu.
4. **OK**  
accepts your selection or displays the current mode.  
**◀ / ▶ (Volume Up/Down)**  
adjusts the volume.  
adjusts menu settings.  
**▲ / ▼ (Programme Up/Down)**  
selects a programme or a menu item.  
switches the set on from standby.
5. **REMOTE CONTROL SENSOR**
6. **HEADPHONE SOCKET**  
Connect the headphone plug to this socket.
7. **AUDIO/VIDEO IN SOCKETS (AV3)**  
Connect the audio/video out sockets of external equipment to these sockets.  
**S-VIDEO/AUDIO IN SOCKETS (S-AV)**  
Connect the video out socket of an S-VIDEO VCR to the **S-VIDEO** socket.  
Connect the audio out sockets of the S-VIDEO VCR to the audio sockets as in **AV3**.
8. **EYE**  
adjusts picture according to the surrounding conditions.

**Note :** Do not place any heavy objects (over 4 Kg) on the RE-29FA31 series models.

# DISASSEMBLY INSTRUCTIONS

## Important note

This set is disconnected from the power supply through the converter transformer. An isolating transformer is necessary for service operations on the primary side of the converter transformer.

## Back Cabinet Removal

Remove the screws residing on the back cabinet and carefully separate the back cabinet from the front cabinet. (Fig. 2-1).

## CPT Removal

1. Pull out the CPT board from the CPT neck.
2. Place the front cabinet on soft material not to mar the front surface or damage control knobs.
3. Remove 4 screws securing the picture tube mounting brackets to the front cabinet.
4. Carefully separate CPT from the front cabinet.

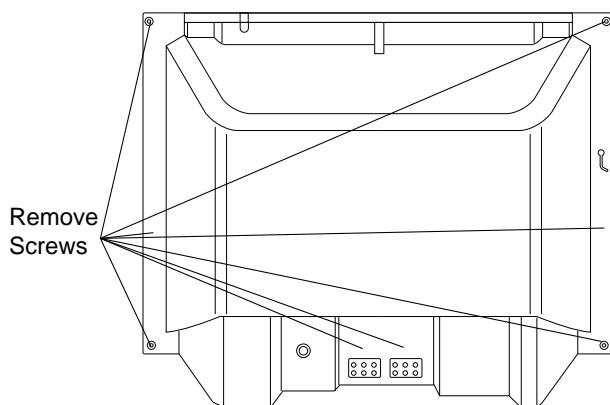


Fig. 2-1

## Chassis Assy Removal

Grasp both side of Frame and pull it backward smoothly.

## PICTURE TUBE HANDLING CAUTION

Due to high vacuum and large surface area of picture tube, great care must be exercised when handling picture tube. Always lift picture tube by grasping it firmly around faceplate. NEVER LIFT TUBE BY ITS NECK! The picture tube must not be scratched or subjected to excessive pressure as fracture of glass may result in an implosion of considerable violence which can cause personal injury or property damage.

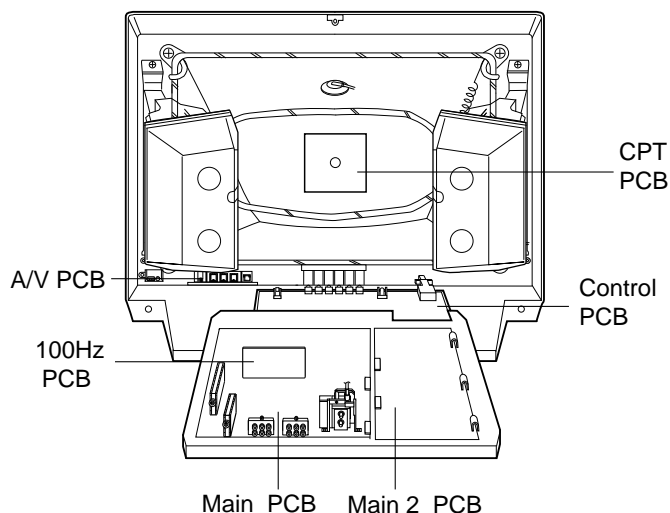


Fig. 2-2



# ADJUSTMENT INSTRUCTIONS

## ■ Safety Precautions

1. It is safe to adjust after using insulating transformer between the power supply line and chassis input to prevent the risk of electric shock and protect the instrument.
2. Never disconnect leads while the TV receiver is on.
3. Don't short any portion of circuits while power is on.
4. The adjustment must be done by the correct appliances.
5. Unless otherwise noted, set the line voltage to 230Vac±10%, 50Hz.
5. The adjustment of TV should be performed after warming up for 15 minutes.

## ■ Test Equipment required

1. RF signal generator (with pattern generator)
2. DC Power Supply
3. Multimeter (volt meter)
4. Oscilloscope
5. Color analyzer

## ● Focus Adjustment

**Test Point : Observing Display**

**Adjust : Focus control of FBT**

- 1) Tune the TV set to receive a digital pattern.
- 2) Adjust the lower Focus volume of FBT for the best focus of vertical line B.
- 3) Adjust the upper Focus volume of FBT for the best focus of area A.
- 4) Repeat above step 2) and 3) for the best overall focus.

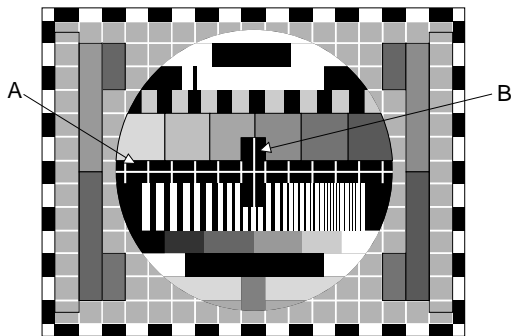


Fig. 1

## ● Screen Voltage Adjustment

- 1) Turn the TV set on.
- 2) This adjustment should be performed after warming up for more than 15 minutes.
- 3) Enter the SVC mode by pressing the SVC button on remote controller and by pressing the H-LINE button.
- 4) If "OK" appear more than 2 on the screen turning screen volume, press the "OK" button.

## ● White Balance Adjustment

**NOTE :** This adjustment should be performed after screen voltage adjustment.

- 1) Tune the TV set to receive an 100% white pattern.
- 2) Press Channel UP/DOWN button for desirous function Adjustment.
- 3) Press Volume UP/DOWN button to adjust the data.
- 4) Adjust until "CONTRAST" and "BRIGHT" become 3.5 Ft\_L
- 5) Enter the SVC mode by pressing the SVC button.
- 6) Adjust the Y value of High Light with R-DRIVE and adjust the X value with B-DRIVE until they have the color coordinate of High Light as below.
- 7) Adjust until "CONTRAST" and "BRIGHT" become 4.5 Ft\_L
- 8) Enter the adjustment mode by pressing the SVC button.
- 9) Adjust the Y value of Low Light with R-CUTOFF and adjust the X value with B-CUTOFF until they have the color coordinate of Low Light as below.
- 10) Repeat adjusting until the color coordinate of High and Low Light is satisfied.
- 11) Check the adjusted color coordinate with a white balance meter.

Color Tem.	X	Y	Memo
13000K	266±8	273±8	NON EU
10000K	282±8	288±8	EU

Menu	LG 29" FLAT	LG 32" FLAT	MENO
CR	0080		Low Light Adj
CG	0080		Low Light Adj
CB	0080		Low Light Adj
WR	019B		High Light Adj
WG	019B		High Light Adj
WB	019B		High Light Adj

## ● Deflection Data Adjustment

- 1) Deflection Data Adjustment should be performed with the remote controller for handset.
- 2) Enter the SVC mode by pressing the SVC button.
- 3) Enter the Deflection Adjustment mode by pressing the ADJUST button.
- 4) Press the Channel UP/DOWN button to select adjustment items.
- 5) Press the Volume UP/DOWN button to adjust the data.
- 6) The TV set receives PAL-B/G Digital pattern.

### VL (Vertical Linearity)

Adjust so that the boundary line between upper and lower half is in accord with geometric horizontal center of the CPT.

**VA (Vertical Amplitude)**

Adjust so that the circle of a digital circle pattern may be located within the effective screen of the CPT.

**SC (Vertical "S" Correction)**

Adjust so that all distance between each horizontal lines are to be the same.

**VS--(Vertical Shift)**

Adjust so that the horizontal center line of a digital circle pattern is in accord with geometric horizontal center of the CPT.

**HS (Horizontal Shift)**

Adjust so that the vertical center line of a digital circle pattern is in accord with geometric vertical center of the CPT.

**EW (Horizontal Width)**

Adjust to that a digital circle pattern looks like exact circle.

**ET--(East-west Trapezium)**

Adjust to make the length of top horizontal line same with it of the bottom horizontal line.

**EP (East-west Parabolar)**

Adjust so that middle portion of the outermost left and right vertical line looks like parallel with vertical lines of the CPT.

**CRNU & CRNL**

Adjust so that the vertical line at every 4 corners of the screen looks like parallel with the vertical lines of the CPT.

**BOW**

In line adjustment, not to change default value is basic.

**ANG**

In angle adjustment, adjust until inclination of left and right screen should be precise.

Menu	Range	LG 29" FLAT	PHILIP 32" FLAT	
VL	0~FFFF	0003	0000	
VA	0~FFFF	0022	002D	
SC	0~FFFF	0033	0000	
VS	0~FFFF	FFFD	FFFE	
HS	0~FFFF	0079	0079	
EW	0~FFFF	0011	001B	
ET	0~FFFF	FFFE	FFFF	
EP	0~FFFF	FFD1	FFC8	
CRNU	0~FFFF	000B	0002	
CRNL	0~FFFF	000A	0002	
BOW	0~FFFF	0000	0000	
ANGLE	0~FFFF	0000	0000	
CRNU6	0~FFFF	FFF9	0000	
CRNL6	0~FFFF	FFFC	0001	

● **OPTION Adjustment (SVC MODE:OPTION-1, OPTION-2, OPTION-3,Teletext)**

- 1) Press YELLOW button or OP1,OP2,OP3,OP4 button on SVC Remote Controller .
- 2) Input data directly by the buttons corresponded with OPTION1 ???(0~127), OPTION2 ??(0~63), OPTION3 ???(0~127) .
- 3) Select each OPTION function by the CH Up/Down button and then set up each OPTION by the VOL Up/Down button.

**Table 1. OPTION 1 Function**

Option	Code	Function	Remark
TEXT	0	Without TXT	
	1	With TXT	
TOP	0	FLOP TXT	Without TOP Text
	1	TOP TEXT	
ACMS	0	Without ACMS funtion	Australilia
	1	With ACMS funtion	
CH+AU	0	Without D/K CHINA or BB System	
	1	With D/K CHINA or BB System	
EYE	0	WITHOUT EYE	
	1	WITH EYE	
TURBO	0	Without TURBO SEARCH Funtion	
	1	With TURBO SEARCH Funtion	

**Table 2. OPTION 1 CODE Data**

OPTION Data	TXT	TOP	ACMS	CH+AU	EYE	TORBO
0	0	0	0	0	0	0
1	0	0	0	0	0	1
2	0	0	0	0	1	0
3	0	0	0	0	1	1
4	0	0	0	1	0	0
5	0	0	0	1	0	1
6	0	0	0	1	1	0
7	0	0	0	1	1	1
8	0	0	1	0	0	0
9	0	0	1	0	0	1
10	0	0	1	0	1	0
11	0	0	1	0	1	1
12	0	0	1	1	0	0
13	0	0	1	1	0	1
14	0	0	1	1	1	0
15	0	0	1	1	1	1
16	0	1	0	0	0	0

DATA	TXT	TOP	ACMS	CH+AU	EYE	TURBO
17	0	1	0	0	0	1
18	0	1	0	0	1	0
19	0	1	0	0	1	1
20	0	1	0	1	0	0
21	0	1	0	1	0	1
22	0	1	0	1	1	0
23	0	1	0	1	1	1
24	0	1	1	0	0	0
25	0	1	1	0	0	1
26	0	1	1	0	1	0
27	0	1	1	0	1	1
28	0	1	1	1	0	0
29	0	1	1	1	0	1
30	0	1	1	1	1	0
31	0	1	1	1	1	1
32	1	0	0	0	0	0
33	1	0	0	0	0	1
34	1	0	0	0	1	0
35	1	0	0	0	1	1
36	1	0	0	1	0	0
37	1	0	0	1	0	1
38	1	0	0	1	1	0
39	1	0	0	1	1	1
40	1	0	1	0	0	0
41	1	0	1	0	0	1
42	1	0	1	0	1	0
43	1	0	1	0	1	1
44	1	0	1	1	0	0
45	1	0	1	1	0	1
46	1	0	1	1	1	0
47	1	0	1	1	1	1
48	1	1	0	0	0	0
49	1	1	0	0	0	1
50	1	1	0	0	1	0
51	1	1	0	0	1	1
52	1	1	0	1	0	0
53	1	1	0	1	0	1
54	1	1	0	1	1	0
55	1	1	0	1	1	1
56	1	1	1	0	0	0
57	1	1	1	0	0	1
58	1	1	1	0	1	0
59	1	1	1	0	1	1
60	1	1	1	1	0	0
61	1	1	1	1	0	1
62	1	1	1	1	1	0
63	1	1	1	1	1	1

**Table 3. OPTION 2 Function**

Option	Code	Function	Remark
C MUTE	0	CARRIER MUTE(MSP-3410)	EU
	1	Not CARRIER MUTE(MSP-3410)	NON EU
A2 ST	0	NICAM Check	
	1	NICAM & FM STEREO	
I/II SV	0	NO SAVE DUAL/SOUND Condition	EU
	1	SAVE DUAL SOUND Condition	NON EU
MONO	0	Without Forced MONO sound System	
	1	With Forced MONO sound System	
VOL	0	NORMAL VOLUME CURVE	
	1	RUSHED VOLUME CURVE	
200 PR	0	100 PROGRAM SAVE	CHINA ONLY
	1	200 PROGRAM SAVE	
SYS	0	B/G,I.D/K	
	1	B/G,I.D/K,L/L'	
	2	B/G,I.D/K,M	
	3	RESERVED	

**Table 4. OPTION 2 CODE Data**

OPTION Data	CMUTE	A2 ST	AI/II SV	MONO	VOL	200 PRO	SYS
0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1
2	0	0	0	0	0	0	2
3	0	0	0	0	0	0	3
4	0	0	0	0	0	1	0
5	0	0	0	0	0	1	1
6	0	0	0	0	0	1	2
7	0	0	0	0	0	1	3
8	0	0	0	0	1	0	0
9	0	0	0	0	1	0	1
10	0	0	0	0	1	0	2
11	0	0	0	0	1	0	3
12	0	0	0	0	1	1	0
13	0	0	0	0	1	1	1
14	0	0	0	0	1	1	2
15	0	0	0	0	1	1	3
16	0	0	0	1	0	0	0
17	0	0	0	1	0	0	1
18	0	0	0	1	0	0	2
19	0	0	0	1	0	0	3
20	0	0	0	1	0	1	0
21	0	0	0	1	0	1	1
22	0	0	0	1	0	1	2
23	0	0	0	1	0	1	3
24	0	0	0	1	1	0	0

OPTION Data	CMUTE	A2 ST	I/I SV	MONO	VOL	200 PRO	SYS
25	0	0	0	1	1	0	1
26	0	0	0	1	1	0	2
27	0	0	0	1	1	0	3
28	0	0	0	1	1	1	0
29	0	0	0	1	1	1	1
30	0	0	0	1	1	1	2
31	0	0	0	1	1	1	3
32	0	0	1	0	0	0	0
33	0	0	1	0	0	0	1
34	0	0	1	0	0	0	2
35	0	0	1	0	0	0	3
36	0	0	1	0	0	1	0
37	0	0	1	0	0	1	1
38	0	0	1	0	0	1	2
39	0	0	1	0	0	1	3
40	0	0	1	0	1	0	0
41	0	0	1	0	1	0	1
42	0	0	1	0	1	0	2
43	0	0	1	0	1	0	3
44	0	0	1	0	1	1	0
45	0	0	1	0	1	1	1
46	0	0	1	0	1	1	2
47	0	0	1	0	1	1	3
48	0	0	1	1	0	0	0
49	0	0	1	1	0	0	1
50	0	0	1	1	0	0	2
51	0	0	1	1	0	0	3
52	0	0	1	1	0	1	0
53	0	0	1	1	0	1	1
54	0	0	1	1	0	1	2
55	0	0	1	1	0	1	3
56	0	0	1	1	1	0	0
57	0	0	1	1	1	0	1
58	0	0	1	1	1	0	2
59	0	0	1	1	1	0	3
60	0	0	1	1	1	1	0
61	0	0	1	1	1	1	1
62	0	0	1	1	1	1	2
63	0	0	1	1	1	1	3
64	0	1	0	0	0	0	0
65	0	1	0	0	0	0	1
66	0	1	0	0	0	0	2
67	0	1	0	0	0	0	3
68	0	1	0	0	0	1	0
69	0	1	0	0	0	1	1
70	0	1	0	0	0	1	2

OPTION Data	CMUTE	A2 ST	I/I SV	MONO	VOL	200 PRO	SYS
71	0	1	0	0	0	1	3
72	0	1	0	0	1	0	0
73	0	1	0	0	1	0	1
74	0	1	0	0	1	0	2
75	0	1	0	0	1	0	3
76	0	1	0	0	1	1	0
77	0	1	0	0	1	1	1
78	0	1	0	0	1	1	2
79	0	1	0	0	1	1	3
80	0	1	0	1	0	0	0
81	0	1	0	1	0	0	1
82	0	1	0	1	0	0	2
83	0	1	0	1	0	0	3
84	0	1	0	1	0	1	0
85	0	1	0	1	0	1	1
86	0	1	0	1	0	1	2
87	0	1	0	1	0	1	3
88	0	1	0	1	1	0	0
89	0	1	0	1	1	0	1
90	0	1	0	1	1	0	2
91	0	1	0	1	1	0	3
92	0	1	0	1	1	1	0
93	0	1	0	1	1	1	1
94	0	1	0	1	1	1	2
95	0	1	0	1	1	1	3
96	0	1	1	0	0	0	0
97	0	1	1	0	0	0	1
98	0	1	1	0	0	0	2
99	0	1	1	0	0	0	3
100	0	1	1	0	0	1	0
101	0	1	1	0	0	1	1
102	0	1	1	0	0	1	2
103	0	1	1	0	0	1	3
104	0	1	1	0	1	0	0
105	0	1	1	0	1	0	1
106	0	1	1	0	1	0	2
107	0	1	1	0	1	0	3
108	0	1	1	0	1	1	0
109	0	1	1	0	1	1	1
110	0	1	1	0	1	1	2
111	0	1	1	0	1	1	3
112	0	1	1	1	0	0	0
113	0	1	1	1	0	0	1
114	0	1	1	1	0	0	2
115	0	1	1	1	0	0	3
116	0	1	1	1	0	1	0

OPTION Data	CMUTE	A2 ST	I/II SV	MONO	VOL	200 PRO	SYS
117	0	1	1	1	0	1	1
118	0	1	1	1	0	1	2
119	0	1	1	1	0	1	3
120	0	1	1	1	1	0	0
121	0	1	1	1	1	0	1
122	0	1	1	1	1	0	2
123	0	1	1	1	1	0	3
124	0	1	1	1	1	1	0
125	0	1	1	1	1	1	1
126	0	1	1	1	1	1	2
127	0	1	1	1	1	1	3
128	1	0	0	0	0	0	0
129	1	0	0	0	0	0	1
130	1	0	0	0	0	0	2
131	1	0	0	0	0	0	3
132	1	0	0	0	0	1	0
133	1	0	0	0	0	1	1
134	1	0	0	0	0	1	2
135	1	0	0	0	0	1	3
136	1	0	0	0	1	0	0
137	1	0	0	0	1	0	1
138	1	0	0	0	1	0	2
139	1	0	0	0	1	0	3
140	1	0	0	0	1	1	0
141	1	0	0	0	1	1	1
142	1	0	0	0	1	1	2
143	1	0	0	0	1	1	3
144	1	0	0	1	0	0	0
145	1	0	0	1	0	0	1
146	1	0	0	1	0	0	2
147	1	0	0	1	0	0	3
148	1	0	0	1	0	1	0
149	1	0	0	1	0	1	1
150	1	0	0	1	0	1	2
151	1	0	0	1	0	1	3
152	1	0	0	1	1	0	0
153	1	0	0	1	1	0	1
154	1	0	0	1	1	0	2
155	1	0	0	1	1	0	3
156	1	0	0	1	1	1	0
157	1	0	0	1	1	1	1
158	1	0	0	1	1	1	2
159	1	0	0	1	1	1	3
160	1	0	1	0	0	0	0
161	1	0	1	0	0	0	1
162	1	0	1	0	0	0	2

OPTION Data	CMUTE	A2 ST	I/II SV	MONO	VOL	200 PRO	SYS
163	1	0	1	0	0	0	3
164	1	0	1	0	0	1	0
165	1	0	1	0	0	1	1
166	1	0	1	0	0	1	2
167	1	0	1	0	0	1	3
168	1	0	1	0	1	0	0
169	1	0	1	0	1	0	1
170	1	0	1	0	1	0	2
171	1	0	1	0	1	0	3
172	1	0	1	0	1	1	0
173	1	0	1	0	1	1	1
174	1	0	1	0	1	1	2
175	1	0	1	0	1	1	3
176	1	0	1	1	0	0	0
177	1	0	1	1	0	0	1
178	1	0	1	1	0	0	2
179	1	0	1	1	0	0	3
180	1	0	1	1	0	1	0
181	1	0	1	1	0	1	1
182	1	0	1	1	0	1	2
183	1	0	1	1	0	1	3
184	1	0	1	1	1	0	0
185	1	0	1	1	1	0	1
186	1	0	1	1	1	0	2
187	1	0	1	1	1	0	3
188	1	0	1	1	1	1	0
189	1	0	1	1	1	1	1
190	1	0	1	1	1	1	2
191	1	0	1	1	1	1	3
192	1	1	0	0	0	0	0
193	1	1	0	0	0	0	1
194	1	1	0	0	0	0	2
195	1	1	0	0	0	0	3
196	1	1	0	0	0	1	0
197	1	1	0	0	0	1	1
198	1	1	0	0	0	1	2
199	1	1	0	0	0	1	3
200	1	1	0	0	1	0	0
201	1	1	0	0	1	0	1
202	1	1	0	0	1	0	2
203	1	1	0	0	1	0	3
204	1	1	0	0	1	1	0
205	1	1	0	0	1	1	1
206	1	1	0	0	1	1	2
207	1	1	0	0	1	1	3
208	1	1	0	1	0	0	0

OPTION Data	CMUTE	A2 ST	I/II SV	MONO	VOL	200 PR	SYS
209	1	1	0	1	0	0	1
210	1	1	0	1	0	0	2
211	1	1	0	1	0	0	3
212	1	1	0	1	0	1	0
213	1	1	0	1	0	1	1
214	1	1	0	1	0	1	2
215	1	1	0	1	0	1	3
216	1	1	0	1	1	0	0
217	1	1	0	1	1	0	1
218	1	1	0	1	1	0	2
219	1	1	0	1	1	0	3
220	1	1	0	1	1	1	0
221	1	1	0	1	1	1	1
222	1	1	0	1	1	1	2
223	1	1	0	1	1	1	3
224	1	1	1	0	0	0	0
225	1	1	1	0	0	0	1
226	1	1	1	0	0	0	2
227	1	1	1	0	0	0	3
228	1	1	1	0	0	1	0
229	1	1	1	0	0	1	1
230	1	1	1	0	0	1	2
231	1	1	1	0	0	1	3
232	1	1	1	0	0	0	0
233	1	1	1	0	1	0	1
234	1	1	1	0	1	0	2
235	1	1	1	0	1	0	3
236	1	1	1	0	1	1	0
237	1	1	1	0	1	1	1
238	1	1	1	0	1	1	2
239	1	1	1	0	1	1	3
240	1	1	1	1	1	0	0
241	1	1	1	1	0	0	1
242	1	1	1	1	0	0	2
243	1	1	1	1	0	0	3
244	1	1	1	1	0	1	0
245	1	1	1	1	0	1	1
246	1	1	1	1	0	1	2
247	1	1	1	1	0	1	3
248	1	1	1	1	1	0	0
249	1	1	1	1	1	0	1
250	1	1	1	1	1	0	2
251	1	1	1	1	1	0	3
252	1	1	1	1	1	1	0
253	1	1	1	1	1	1	1
254	1	1	1	1	1	1	2

OPTION Data	CMUTE	A2 ST	I/II SV	MONO	VOL	200 PR	SYS
255	1	1	1	1	1	1	3

**Table 5. OPTION 2 Function**

Option	Code	Function	Remark
TBS	0	BOOSTER CONTROL	W/O PIP MODEL
	1		W/PIP MODEL
TOUCH	0	LOCAL KEY	
	1	SOFT TOUCH	
DOLBY	0	NO VIRTUAL DOLBY	MSP3411
	1	VIRTUAL DOLBY	
HP VOL	0	WITHOUT H/PHONE VOLUME	
	1	WITH H/PHONE VOLUME	
WOOF	0	WITHOUT WOOF SPEAKER	
	1	WITH WOOF SPEAKER	
WIDE	0	4:3 TV	
	1	16:9 TV	
DVD	0	WITHOUT DVD INPUT	
	1	WITH DVD INPUT	
SCART	0	PHONE JACK	
	1	SCART JACK	

**Table 6. OPTION 3 CODE Data**

DATA	TBS	TOUCH	DOLBY	HPVOL	WOOF	WIDE	DVD	SCART
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	1	0
3	0	0	0	0	0	0	1	1
4	0	0	0	0	0	1	0	0
5	0	0	0	0	0	1	0	1
6	0	0	0	0	0	1	1	0
7	0	0	0	0	0	1	1	1
8	0	0	0	0	1	0	0	0
9	0	0	0	0	1	0	0	1
10	0	0	0	0	1	0	1	0
11	0	0	0	0	1	0	1	1
12	0	0	0	0	1	1	0	0
13	0	0	0	0	1	1	0	1
14	0	0	0	0	1	1	1	0
15	0	0	0	0	1	1	1	1
16	0	0	0	1	0	0	0	0
17	0	0	0	1	0	0	0	1
18	0	0	0	1	0	0	1	0
19	0	0	0	1	0	0	1	1
20	0	0	0	1	0	1	0	0
21	0	0	0	1	0	1	0	1
22	0	0	0	1	0	1	1	0
23	0	0	0	1	0	1	1	1
24	0	0	0	1	1	0	0	0
25	0	0	0	1	1	0	0	1
26	0	0	0	1	1	0	1	0
27	0	0	0	1	1	0	1	1
28	0	0	0	1	1	1	0	0
29	0	0	0	1	1	1	0	1
30	0	0	0	1	1	1	1	0
31	0	0	0	1	1	1	1	1
32	0	0	1	0	0	0	0	0
33	0	0	1	0	0	0	0	1
34	0	0	1	0	0	0	1	0
35	0	0	1	0	0	0	1	1
36	0	0	1	0	0	1	0	0
37	0	0	1	0	0	1	0	1
38	0	0	1	0	0	1	1	0
39	0	0	1	0	0	1	1	1
40	0	0	1	0	1	0	0	0
41	0	0	1	0	1	0	0	1
42	0	0	1	0	1	0	1	0
43	0	0	1	0	1	0	1	1
44	0	0	1	0	1	1	0	0

DATA	TBS	TOUCH	DOLBY	HPVOL	WOOF	WIDE	DVD	SCART
45	0	0	1	0	1	1	0	1
46	0	0	1	0	1	1	1	0
47	0	0	1	0	1	1	1	1
48	0	0	1	1	0	0	0	0
49	0	0	1	1	0	0	0	1
50	0	0	1	1	0	0	1	0
51	0	0	1	1	0	0	1	1
52	0	0	1	1	0	1	0	0
53	0	0	1	1	0	1	0	1
54	0	0	1	1	0	1	1	0
55	0	0	1	1	0	1	1	1
56	0	0	1	1	1	0	0	0
57	0	0	1	1	1	0	0	1
58	0	0	1	1	1	0	1	0
59	0	0	1	1	1	0	1	1
60	0	0	1	1	1	1	0	0
61	0	0	1	1	1	1	0	1
62	0	0	1	1	1	1	1	0
63	0	0	1	1	1	1	1	1
64	0	1	0	0	0	0	0	0
65	0	1	0	0	0	0	0	1
66	0	1	0	0	0	0	1	0
67	0	1	0	0	0	0	1	1
68	0	1	0	0	0	1	0	0
69	0	1	0	0	0	1	0	1
70	0	1	0	0	0	1	1	0
71	0	1	0	0	0	1	1	1
72	0	1	0	0	1	0	0	0
73	0	1	0	0	1	0	0	1
74	0	1	0	0	1	0	1	0
75	0	1	0	0	1	0	1	1
76	0	1	0	0	1	1	0	0
77	0	1	0	0	1	1	0	1
78	0	1	0	0	1	1	1	0
79	0	1	0	0	1	1	1	1
80	0	1	0	1	0	0	0	0
81	0	1	0	1	0	0	0	1
82	0	1	0	1	0	0	1	0
83	0	1	0	1	0	0	1	1
84	0	1	0	1	0	1	0	0
85	0	1	0	1	0	1	0	1
86	0	1	0	1	0	1	1	0
87	0	1	0	1	0	1	1	1
88	0	1	0	1	1	0	0	0
89	0	1	0	1	1	0	0	1
90	0	1	0	1	1	0	1	0

DATA	TBS	TOUCH	DOLBY	HPVOL	WOOF	WIDE	DVD	SCART
91	0	1	0	1	1	0	1	1
92	0	1	0	1	1	1	0	0
93	0	1	0	1	1	1	0	1
94	0	1	0	1	1	1	1	0
95	0	1	1	0	0	1	1	1
96	0	1	1	0	0	0	0	0
97	0	1	1	0	0	0	0	1
98	0	1	1	0	0	0	1	0
99	0	1	1	0	0	0	1	1
100	0	1	1	0	0	1	0	0
101	0	1	1	0	0	1	0	1
102	0	1	1	0	0	1	1	0
103	0	1	1	0	1	1	1	1
104	0	1	1	0	1	0	0	0
105	0	1	1	0	1	0	0	1
106	0	1	1	0	1	0	1	0
107	0	1	1	0	1	0	1	1
108	0	1	1	0	1	1	0	0
109	0	1	1	0	1	1	0	1
110	0	1	1	0	1	1	1	0
111	0	1	1	0	0	1	1	1
112	0	1	1	1	0	0	0	0
113	0	1	1	1	0	0	0	1
114	0	1	1	1	0	0	1	0
115	0	1	1	1	0	0	1	1
116	0	1	1	1	0	1	0	0
117	0	1	1	1	0	1	0	1
118	0	1	1	1	0	1	1	0
119	0	1	1	1	1	1	1	1
120	0	1	1	1	1	0	0	0
121	0	1	1	1	1	0	0	1
122	0	1	1	1	1	0	1	0
123	0	1	1	1	1	0	1	1
124	0	1	1	1	1	1	0	0
125	0	1	1	1	1	1	0	1
126	0	1	1	1	1	1	1	0
127	0	1	1	1	0	1	1	1
128	1	0	0	0	0	0	0	0
129	1	0	0	0	0	0	0	1
130	1	0	0	0	0	0	1	0
131	1	0	0	0	0	0	1	1
132	1	0	0	0	0	1	0	0
133	1	0	0	0	0	1	0	1
134	1	0	0	0	0	1	1	0
135	1	0	0	0	1	1	1	1
136	1	0	0	0	1	0	0	0

DATA	TBS	TOUCH	DOLBY	HPVOL	WOOF	WIDE	DVD	SCART
137	1	0	0	0	1	0	0	1
138	1	0	0	0	1	0	1	0
139	1	0	0	0	1	0	1	1
140	1	0	0	0	1	1	0	0
141	1	0	0	0	1	1	0	1
142	1	0	0	0	1	1	1	0
143	1	0	0	0	1	1	1	1
144	1	0	0	1	0	0	0	0
145	1	0	0	1	0	0	0	1
146	1	0	0	1	0	0	1	0
147	1	0	0	1	0	0	1	1
148	1	0	0	1	0	1	0	0
149	1	0	0	1	0	1	0	1
150	1	0	0	1	0	1	1	0
151	1	0	0	1	0	1	1	1
152	1	0	0	1	1	0	0	0
153	1	0	0	1	1	0	0	1
154	1	0	0	1	1	0	1	0
155	1	0	0	1	1	0	1	1
156	1	0	0	1	1	1	0	0
157	1	0	0	1	1	1	0	1
158	1	0	0	1	1	1	1	0
159	1	0	0	1	1	1	1	1
160	1	0	1	0	0	0	0	0
161	1	0	1	0	0	0	0	1
162	1	0	1	0	0	0	1	0
163	1	0	1	0	0	0	1	1
164	1	0	1	0	0	1	0	0
165	1	0	1	0	0	1	0	1
166	1	0	1	0	0	1	1	0
167	1	0	1	0	0	1	1	1
168	1	0	1	0	1	0	0	0
169	1	0	1	0	1	0	0	1
170	1	0	1	0	1	0	1	0
171	1	0	1	0	1	0	1	1
172	1	0	1	0	1	1	0	0
173	1	0	1	0	1	1	0	1
174	1	0	1	0	1	1	1	0
175	1	0	1	0	1	1	1	1
176	1	0	1	1	0	0	0	0
177	1	0	1	1	0	0	0	1
178	1	0	1	1	0	0	1	0
179	1	0	1	1	0	0	1	1
180	1	0	1	1	0	1	0	0
181	1	0	1	1	0	1	0	1
182	1	0	1	1	0	1	1	0



DATA	TBS	TOUCH	DOLBY	HPVOL	WOOF	WIDE	DVD	SCART
183	1	0	1	1	0	1	1	1
184	1	0	1	1	1	0	0	0
185	1	0	1	1	1	0	0	1
186	1	0	1	1	1	0	1	0
187	1	0	1	1	1	0	1	1
188	1	0	1	1	1	1	0	0
189	1	0	1	1	1	1	0	1
190	1	0	1	1	1	1	1	0
191	1	0	1	1	1	1	1	1
192	1	1	0	0	0	0	0	0
193	1	1	0	0	0	0	0	1
194	1	1	0	0	0	0	1	0
195	1	1	0	0	0	0	1	1
196	1	1	0	0	0	1	0	0
197	1	1	0	0	0	1	0	1
198	1	1	0	0	0	1	1	0
199	1	1	0	0	0	1	1	1
200	1	1	0	0	1	0	0	0
201	1	1	0	0	1	0	0	1
202	1	1	0	0	1	0	1	0
203	1	1	0	0	1	0	1	1
204	1	1	0	0	1	1	0	0
205	1	1	0	0	1	1	0	1
206	1	1	0	0	1	1	1	0
207	1	1	0	0	1	1	1	1
208	1	1	0	1	0	0	0	0
209	1	1	0	1	0	0	0	1
210	1	1	0	1	0	0	1	0
211	1	1	0	1	0	0	1	1
212	1	1	0	1	0	1	0	0
213	1	1	0	1	0	1	0	1
214	1	1	0	1	0	1	1	0
215	1	1	0	1	1	1	1	1
216	1	1	0	1	1	0	0	0
217	1	1	0	1	1	0	0	1
218	1	1	0	1	1	0	1	0
219	1	1	0	1	1	0	1	1
220	1	1	0	1	1	1	0	0
221	1	1	0	1	1	1	0	1
222	1	1	0	1	1	1	1	0
223	1	1	1	0	0	1	1	1
224	1	1	1	0	0	0	0	0
225	1	1	1	0	0	0	0	1
226	1	1	1	0	0	0	1	0
227	1	1	1	0	0	0	1	1
228	1	1	1	0	0	1	0	0

DATA	TBS	TOUCH	DOLBY	HPVOL	WOOF	WIDE	DVD	SCART
229	1	1	1	0	0	1	0	1
230	1	1	1	0	0	1	1	0
231	1	1	1	0	0	1	1	1
232	1	1	1	0	1	0	0	0
233	1	1	1	0	1	0	0	1
234	1	1	1	0	1	0	1	0
235	1	1	1	0	1	0	1	1
236	1	1	1	0	1	1	0	0
237	1	1	1	0	1	1	0	1
238	1	1	1	0	1	1	1	0
239	1	1	1	0	1	1	1	1
240	1	1	1	1	0	0	0	0
241	1	1	1	1	0	0	0	1
242	1	1	1	1	0	0	1	0
243	1	1	1	1	0	0	1	1
244	1	1	1	1	0	1	0	0
245	1	1	1	1	0	1	0	1
246	1	1	1	1	0	1	1	0
247	1	1	1	1	0	1	1	1
248	1	1	1	1	1	0	0	0
249	1	1	1	1	1	0	0	1
250	1	1	1	1	1	0	1	0
251	1	1	1	1	1	0	1	1
252	1	1	1	1	1	1	0	0
253	1	1	1	1	1	1	0	1
254	1	1	1	1	1	1	1	0
255	1	1	1	1	1	1	1	1

**Table 7. OPTION 4 Funtion**

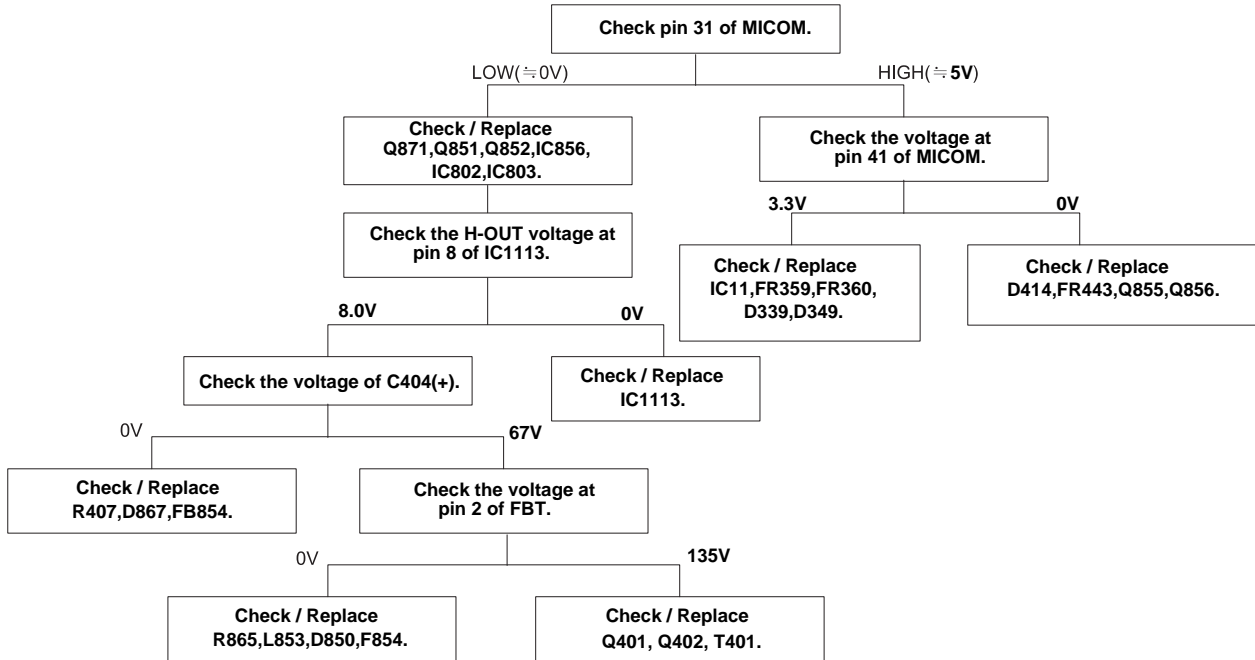
OPTION	CODE	Language	Funciton
LANG	0	E Only	English
	1	English+EU 4	English/German/French/Italian/Spanish
	2	English+Other EU	English/Dutch/Swedish/Norwegian/Danish/Swiss/Portuguess/Romanian/Polish/Hungarian/Czech/Russian
T LAN	0	West Europe	
	1	East Europe	
	2	Turkey	
	3	Czecho/Hungary	
	4	Cyrillic 1	
	5	Cyrillic 2	
	6	Cyrillic 3	
	7	Turkey/Greek 1	
	8	Turkey/Greek 2	
	9	Turkey/Greek 3	
	10	Arab/France	
	11	Arab/English	
	12	Arab/Hebrew 1	
	13	Arab/Hebrew 2	
	14	Farsi/English	
	15	Farsi/France	
	16	Farsi all	

**Table 8. OPTION 4 Code Data**

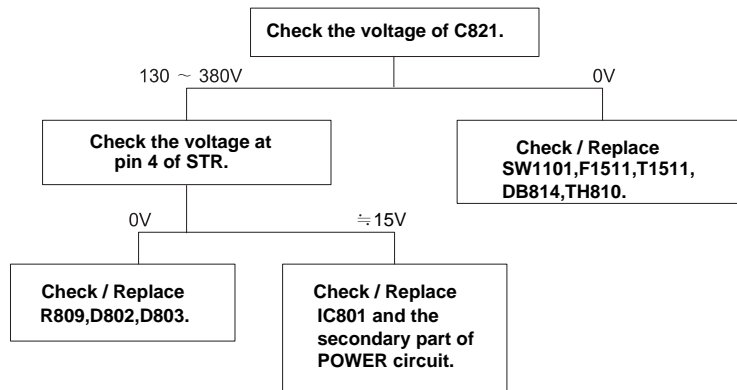
DATA	LANG	TLAN	DATA	LANG	TLAN	DATA	LANG	TLAN	DATA	LANG	TLAN	DATA	LANG	TLAN
000	0	0	203	2	3	406	4	6	609	6	9	812	8	12
001	0	1	204	2	4	407	4	7	610	6	10	813	8	13
002	0	2	205	2	5	408	4	8	611	6	11	814	8	14
003	0	3	206	2	6	409	4	9	612	6	12	815	8	15
004	0	4	207	2	7	410	4	10	613	6	13	816	8	16
005	0	5	208	2	8	411	4	11	614	6	14			
006	0	6	209	2	9	412	4	12	615	6	15			
007	0	7	210	2	10	413	4	13	616	6	16			
008	0	8	211	2	11	414	4	14	700	7	0			
009	0	9	212	2	12	415	4	15	701	7	1			
010	0	10	213	2	13	416	4	16	702	7	2			
011	0	11	214	2	14	500	5	0	703	7	3			
012	0	12	215	2	15	501	5	1	704	7	4			
013	0	13	216	2	16	502	5	2	705	7	5			
014	0	14	300	3	0	503	5	3	706	7	6			
015	0	15	301	3	1	504	5	4	707	7	7			
016	0	16	302	3	2	505	5	5	708	7	8			
100	1	0	303	3	3	506	5	6	709	7	9			
101	1	1	304	3	4	507	5	7	710	7	10			
102	1	2	305	3	5	508	5	8	711	7	11			
103	1	3	306	3	6	509	5	9	712	7	12			
104	1	4	307	3	7	510	5	10	713	7	13			
105	1	5	308	3	8	511	5	11	714	7	14			
106	1	6	309	3	9	512	5	12	715	7	15			
107	1	7	310	3	10	513	5	13	716	7	16			
108	1	8	311	3	11	514	5	14	800	8	0			
109	1	9	312	3	12	515	5	15	801	8	1			
110	1	10	313	3	13	516	5	16	802	8	2			
111	1	11	314	3	14	600	6	0	803	8	3			
112	1	12	315	3	15	601	6	1	804	8	4			
113	1	13	316	3	16	602	6	2	805	8	5			
114	1	14	400	4	0	603	6	3	806	8	6			
115	1	15	401	4	1	604	6	4	807	8	7			
116	1	16	402	4	2	605	6	5	808	8	8			
200	2	0	403	4	3	606	6	6	809	8	9			
201	2	1	404	4	4	607	6	7	810	8	10			
202	2	2	405	4	5	608	6	8	811	8	11			

# TROUBLE SHOOTING

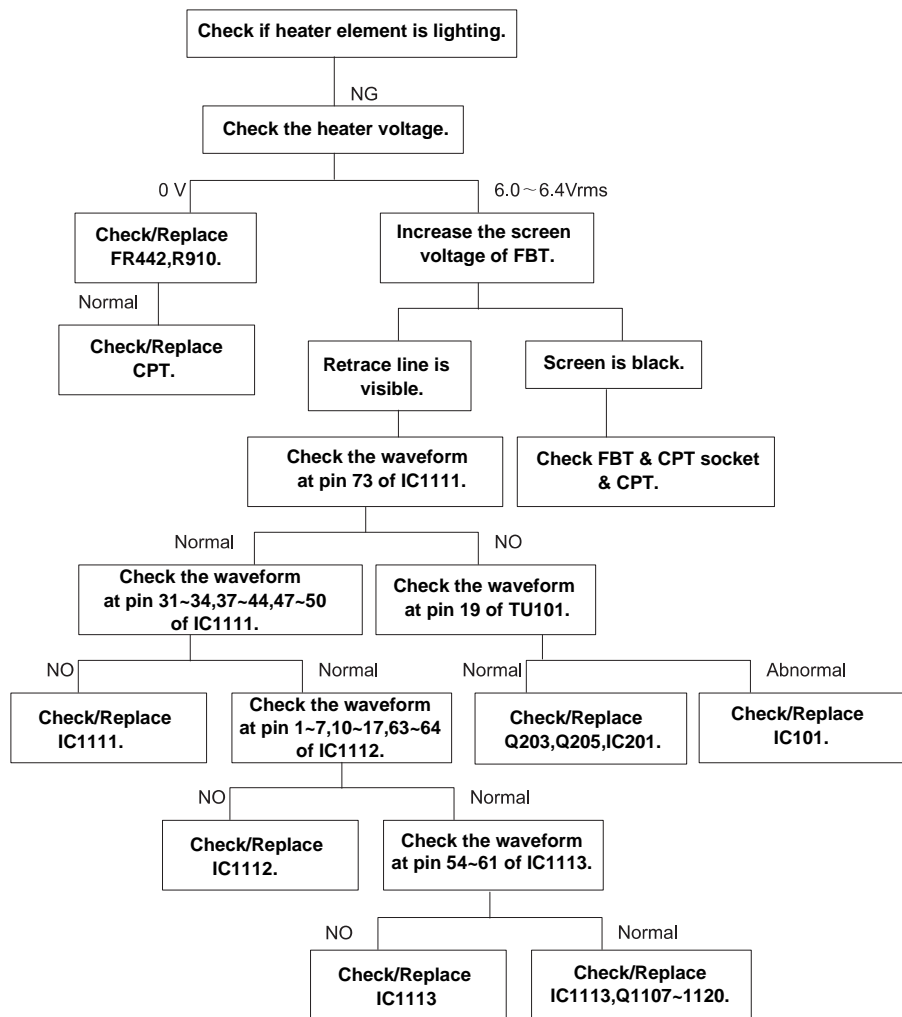
## NO POWER ON BUT SMPS WORKING



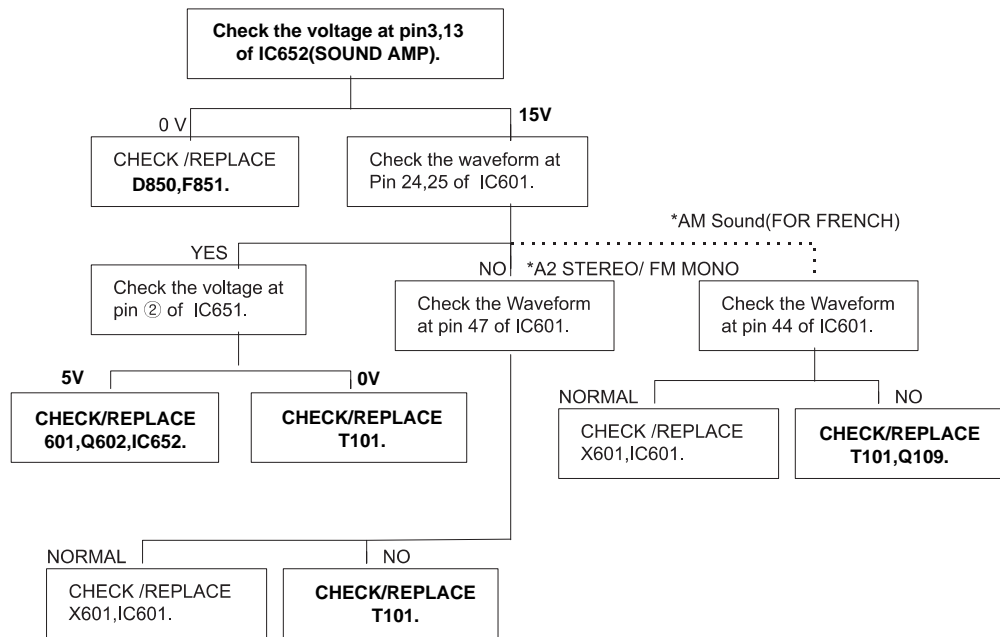
## NO POWER (NOT WORKING SMPS)



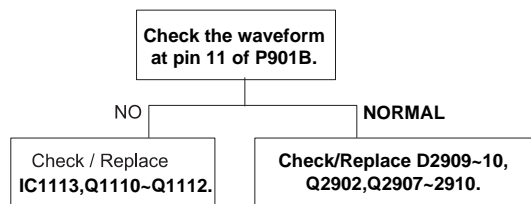
## NO RASTER & PICTURE ( H-OUT OK)



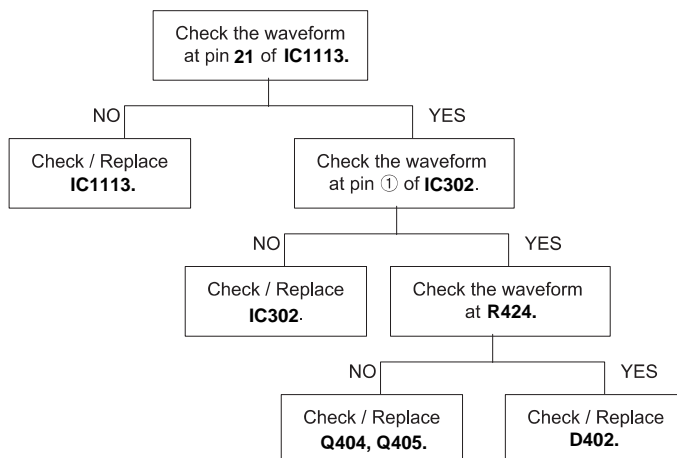
## NO SOUND(PICTURE OK)



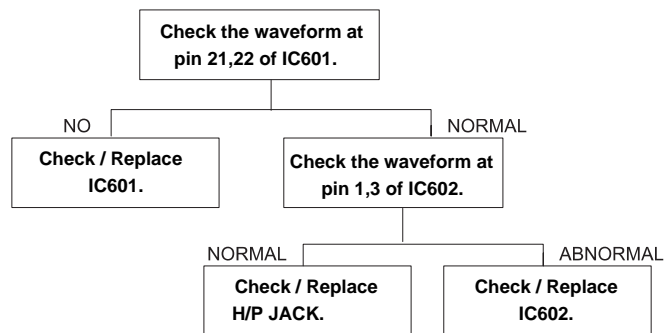
## VM DON T WORKING



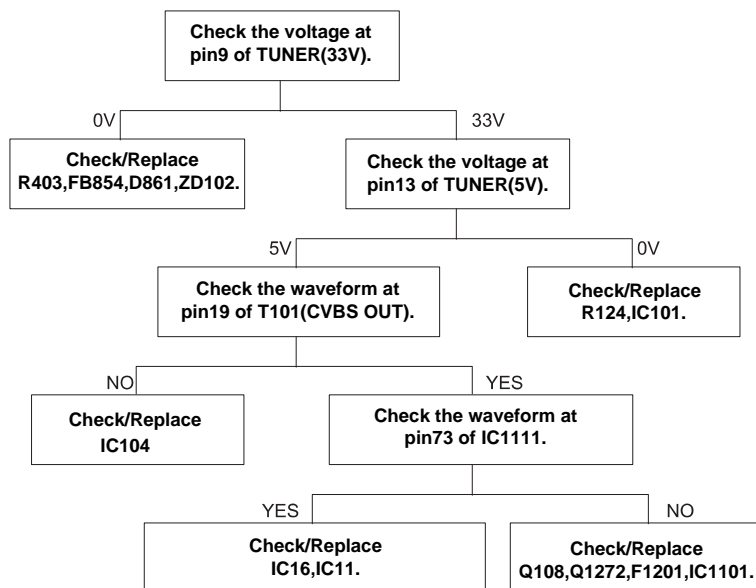
## PIN CUSHION DISTORTION



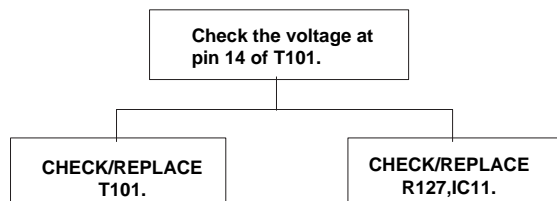
NO SOUND FROM H/P jack(OPTION)  
(but Main Sound OK)



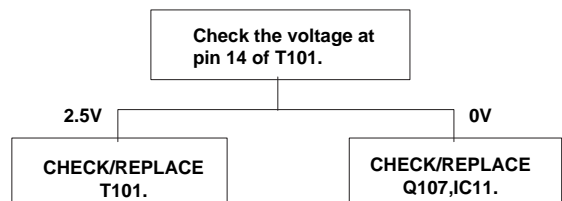
## DON'T CATCH CHANNEL(MAIN)



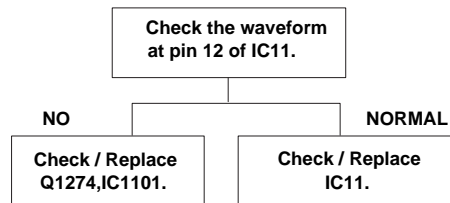
DON T CATCH NTSC-M (OPTION)



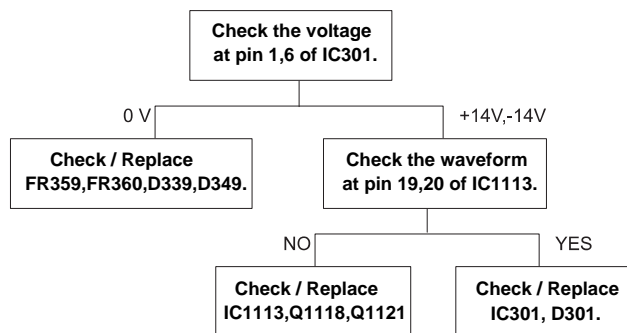
DON T CATCH SECAM-L (OPTION)



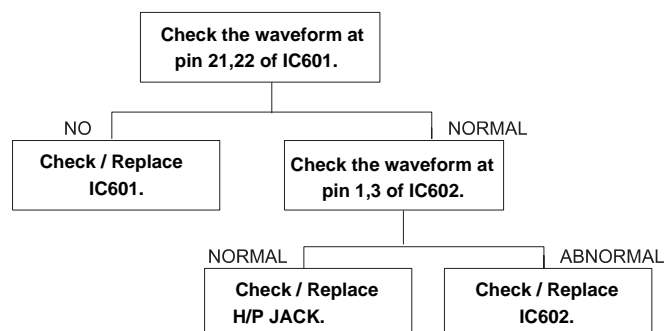
## NO TELETEXT



## NO VERTICAL DEFLECTION

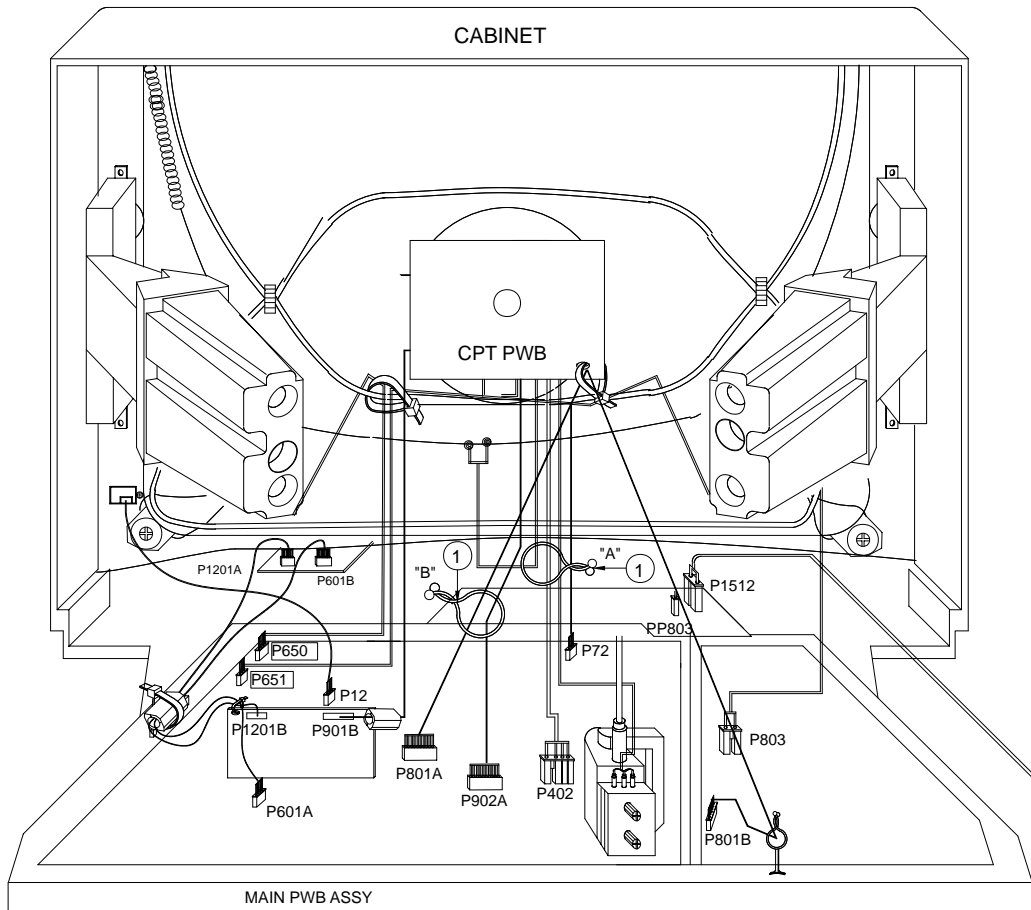


## NO SOUND FROM H/P jack(OPTION) (but Main Sound OK)

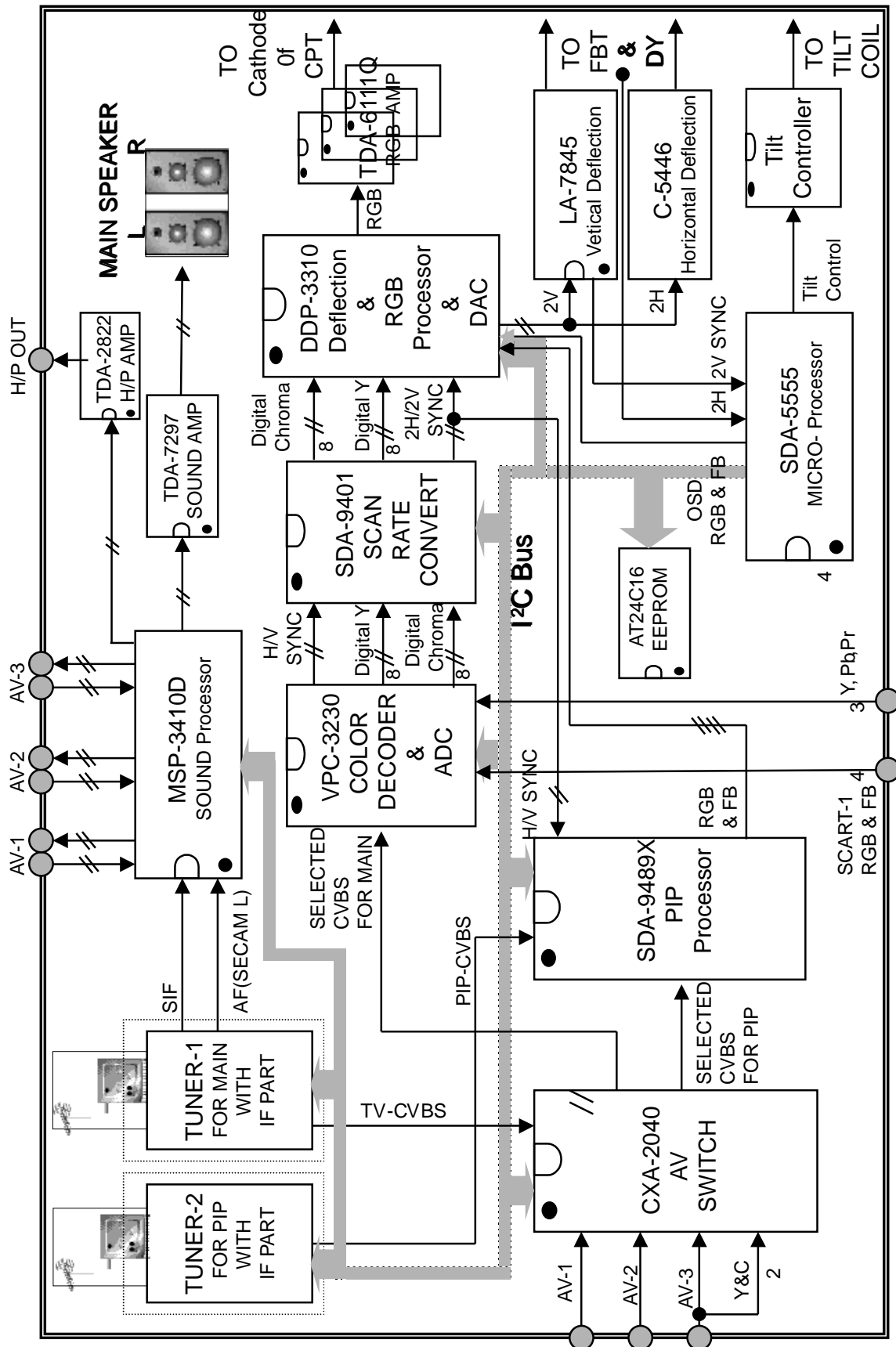




# WIRING DIAGRAM

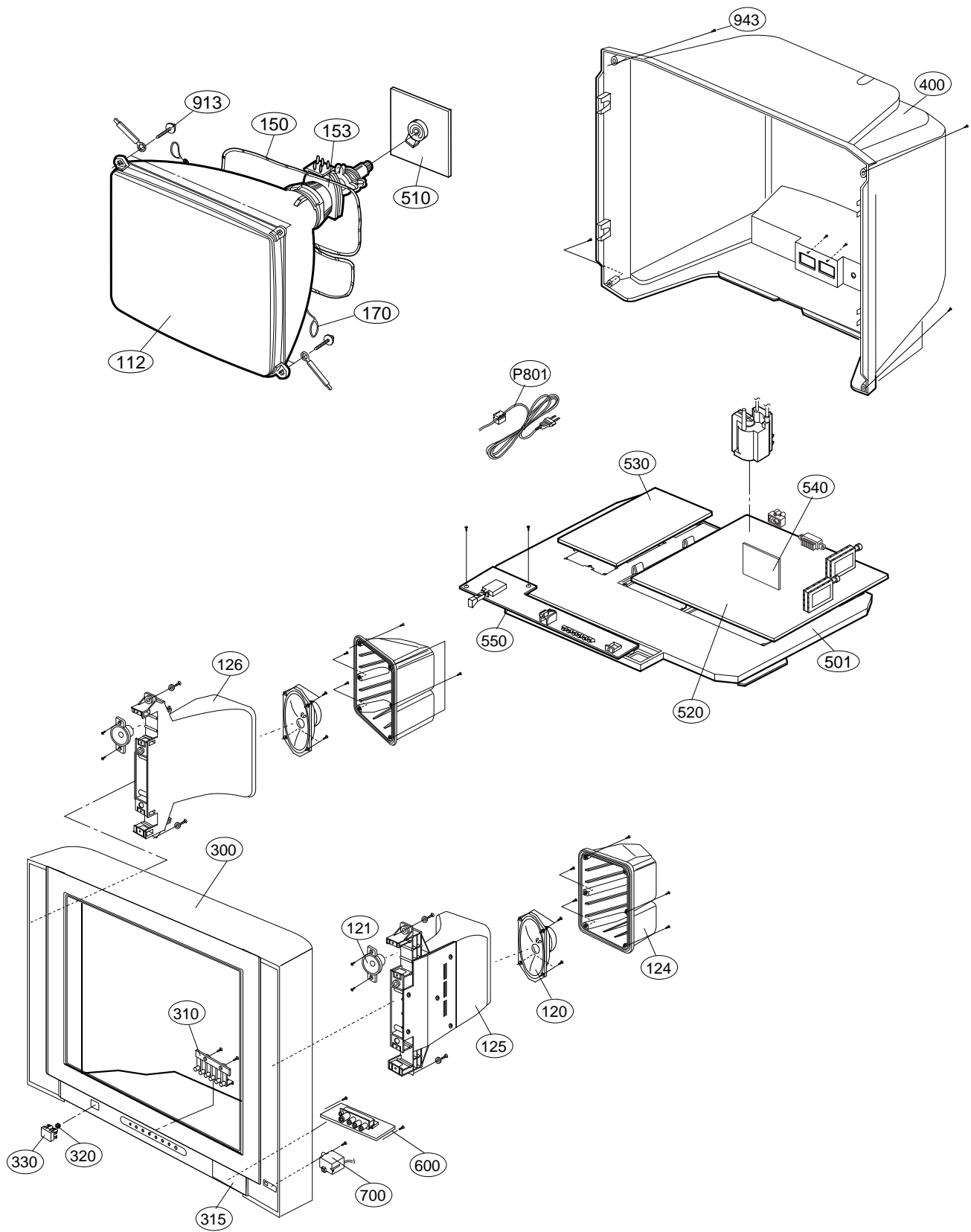


# BLOCK DIAGRAM



## MEMO

**EXPLODED VIEW**



# EXPLODED VIEW PARTS LIST

The components identified by mark  $\Delta$  is critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTIONS
$\Delta$ 112	6341V29005A	CPT ASSY,2426GF239AT 100HZ DY
120	120-D38C	SPEAKER,MID-RANGE 8 OHM 15/25W
	6400VA0035A	SPEAKER,F305C-6169-D38C K.TONE 8 OHM
121	6400VG0002A	SPEAKER,TWEETER T0520101 8 OHM
124	3550V00068A	COVER,DOME PS
125	4810V00165A	BRACKET,DOME(R) PS
126	4810V00165B	BRACKET,DOME(L) PS
$\Delta$ 150	6140VC2005F	COIL,DEGAUSSING 29 FLAT ASSY(W) SELLA
$\Delta$ 153	6150Z-1340F	DY,DC29SLFL2
$\Delta$ 170	170-844K	CPT EARTH,29" 98T 4LUG
300	3091V00316B	CABINET ASSY
	3091V00316F	CABINET ASSY (SILVER)
310	5020V00480A	BUTTON,CONTROL 6KEY
315	3580V00058B	DOOR,FRONT
320	320-062E	SPRING,KNOB
330	5020V00479A	BUTTON,POWER
400	3809V00234C	BACK COVER ASSY
	3809V00234H	BACK COVER ASSY (SILVER)
501	4810V00379D	BRACKET,MAIN
503	3500V00022C	BOARD,A/V(2SCART)
510	6871VSM889A	PWB ASSY,LG29 CPT,SET
520	6871VMM759A	PWB ASSY,MAIN(017A) RE29FA31P,SET
	6871VMM759M	PWB ASSY,MAIN(017A) RE29FA33PX
	6871VMM812B	PWB ASSY,MAIN(017A) RL29FA33PX
	6871VMM812X	PWB ASSY,MAIN(017A) RE29FA33X
	6871VMM812W	PWB ASSY,MAIN(017A) RL29FA33X
530	6871VPM063A	PWB ASSY,SMPS (017A) EU,W/STBY,LG29,SET
	6871VPM063J	PWB ASSY,SMPS (017A) EU,W/O STBY,LG29,SET
	6871VPM072A	PWB ASSY,SMPS (017A) EU,W/O STBY,LG29 CKD
	6871VPM072B	PWB ASSY,SMPS (017A) EU,W/O STBY,LG29,CKD
540	6871VSM913A	PWB ASSY,(017A) 100HZ,EU,W/PIP
	6871VSM913B	PWB ASSY,(017A) EU,W/O PIP
550	6871VSM866A	PWB ASSY,(017A)CTRL-FA30,SET
600	6871VSM922A	PWB ASSY,(017A) SIDE,FA30,SET
700	OIGL120104A	IC,CDS SENSOR MODULE(P1201-04)
913	332-229A	SCREW ASSY,HEXAGON HEAD SPECIAL
943	1PTF0403116	SCREW,TAP TITE(P) D4.0 L16.0 MSWR3/FZB
$\Delta$ P801	174-322D	CORD,POWER W/FILTER L=300(179B)VDE

The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

## REPLACEMENT PARTS LIST

LOCA. NO	PART NO	DESCRIPTION
<b>IC</b>		
IC11	0ICTMIH009A	IC,SD5555-XXA ,LG8013-32A
IC12	0IFA754207A	IC,KA75420ZTA(KA7542ZTA) 3P,TO-92
IC13	0IFA752700A	IC,KA75270Z 3 TP RE-SET IC MC-007
IC14	0IMCRNS005A	IC,LM1117T-3.3 NATIONAL
IC15	0ISG111725B	IC,LD1117V25 3 SIP ST REGULATOR M
IC16	0IAL241600B	IC,AT24C16-10PC 8D EEPROM 16K
IC17	0IKE780800J	IC,KIA7808API 3 ST REGULATOR .
IC18	0IKE780500Q	IC,KIA7805API 3P TO-220 ST REGULA
IC19	0IMCRNS005A	IC,LM1117T-3.3 NATIONAL
IC301	0ISA784500A	IC,LA7845 7SIP V/OUT(1.5A)
IC302	0IKE455800E	IC,KIA4558 8DIP DUAL OP AMP
IC601	0IIT341000J	IC,MSP3410D-C5 52P SDIP BK MULTI
"	0IMCRMN011C	IC,MSP3410G B8
IC602	0ISG282200A	IC,TDA2822M 8D DUAL AUDIO AMP(1W)
IC650	0IFA754207A	IC,KA75420ZTA(KA7542ZTA) 3P,TO-92
IC652	0ISG729700A	IC,TDA7297 15P,SIP BK 2CH 15W DUA
$\Delta$ IC801	0IMCRSK001A	IC,STR-F6456R SANKEN 5PIN(LF1352)
$\Delta$ IC802	0ILI817000G	IC,LTV817M-VB 4P,DIP BK PHOTO COU
$\Delta$ IC803	0ILI817000G	IC,LTV817M-VB 4P,DIP BK PHOTO COU
IC851	0ISS278050A	IC,KA278R05 4P,TO-220F BK LOW DRO
IC853	0ISS278120A	IC,KA278R12 4P,TO-220F BK LOW DRO
IC855	0ISS278050A	IC,KA278R05 4P,TO-220F BK LOW DRO
IC856	0ISK130000A	IC,SE130N 3P 130V ERROR AMP - - -
IC901	0IPH611190A	IC,TDA6111Q 9SIP RGB AMP
IC902	0IPH611190A	IC,TDA6111Q 9SIP RGB AMP
IC903	0IPH611190A	IC,TDA6111Q 9SIP RGB AMP
IC1101	0ISO204000A	IC,CXA2040AQ 32P,QFP BK IIC BUS V
IC1102	0ISM948900A	IC,SDA9489 28PIN SOP TP PIP
IC1103	0IKE780800B	IC,KIA78L08BP(TA) TO-92 8V,150MA
IC1104	0IKE780900H	IC,KIA78L09BP(AT) 3P 9V,150MA
IC1111	0IIT323000D	IC,VPC3230D QA B4 80P QFP TRAY SO
IC1112	0IMCRIH001A	IC,SDA9401 INFINEON 64P QFP TRAY
IC1113	0IMCRMN008A	IC,DDP3310B-PT-F6 MICRONAS 68 QFP
Q11	0IFA270000A	IC,2N7000TA TO-92, 3P TP LEVEL SH
Q12	0IFA270000A	IC,2N7000TA TO-92, 3P TP LEVEL SH
Q13	0IFA270000A	IC,2N7000TA TO-92, 3P TP LEVEL SH
Q14	0IFA270000A	IC,2N7000TA TO-92, 3P TP LEVEL SH
<b>DIODE</b>		
D11	0DD414809ED	DIODE,1N4148 TA
D12	0DD414809ED	DIODE,1N4148 TA
D150	0DD414809ED	DIODE,1N4148 TA
D151	0DD414809ED	DIODE,1N4148 TA
D301	0DD200009AF	DIODE,RECTIFIER RU2M V(1) TP SANKEN
D339	0DD200009AF	DIODE,RECTIFIER RU2M V(1) TP SANKEN
D349	0DD200009AF	DIODE,RECTIFIER RU2M V(1) TP SANKEN
D351	0DD414809ED	DIODE,1N4148 TA
D402	0DD011150AA	DIODE,ESC011M-15
D410	0DD150009CA	DIODE,RECTIFIER RGP15J,TP(52MM)
D412	0DD100009AU	DIODE,RECTIFIER EU1AV(1) TP
D413	0DD150009CC	DIODE,RECTIFIER RGP15G,TP(52MM)

LOCA. NO	PART NO	DESCRIPTION
D414	0DD100009AE	DIODE,RECTIFIER RU1A V(1) TP
D425	0DS113379BA	DIODE,SWITCHING 1SS133 T-72 TP ROHM
D802	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS TP G.I
D803	0DD100009AM	DIODE,RECTIFIER EU1ZV(1) TP
D804	0DD414809ED	DIODE,1N4148 TA
D850	0ISK100300A	IC,SLA1003 SIP12 BK DIODE MODULE(
D851	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS TP G.I
D852	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS TP G.I
D853	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS TP G.I
D854	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS TP G.I
D855	0DD060009AC	DIODE,TVR06J 0.6A/600V 250NS TP G.I
D856	0DD414809ED	DIODE,1N4148 TA
D857	0DD414809ED	DIODE,1N4148 TA
D858	0DD420000BB	DIODE,D4L20U SHINDENGEN
D861	0DD100009AU	DIODE,RECTIFIER EU1AV(1) TP
D864	0DD414809ED	DIODE,1N4148 TA
D865	0DD414809ED	DIODE,1N4148 TA
D900	0DR060009AA	DIODE,RECTIFIER TVR06J TP
D903	0DR060009AA	DIODE,RECTIFIER TVR06J TP
D909	0DR060009AA	DIODE,RECTIFIER TVR06J TP
D910	0DD400509AA	DIODE,RECTIFIER 1N4005 GP
D1100	0DD414809ED	DIODE,1N4148 TA
D1101	0DD414809ED	DIODE,1N4148 TA
D1102	0DD414809ED	DIODE,1N4148 TA
D2901	0DD414809ED	DIODE,1N4148 TA
D2902	0DD414809ED	DIODE,1N4148 TA
D2903	0DD414809ED	DIODE,1N4148 TA
D2906	0DD414809ED	DIODE,1N4148 TA
D2907	0DD414809ED	DIODE,1N4148 TA
D2909	0DD150009CA	DIODE,RECTIFIER RGP15J,TP(52MM),GI
D2910	0DD150009CA	DIODE,RECTIFIER RGP15J,TP(52MM),GI
D2911	0DD414809ED	DIODE,1N4148 TA
DB814	0DRGS00011A	DIODE,RECTIFIERS GSIB660
LD1502	162-002B	DIODE LED ASSY
ZD11	0DZ680009AN	DIODE,ZENER GDZJ6.8B TP GRANDE DO34 0.5W
ZD12	0DZ910009BD	DIODE,ZENER GDZJ9.1B TP GRANDE DO34 0.5W
ZD13	0DZ680009AN	DIODE,ZENER GDZJ6.8B
ZD101	0DZ330009BA	DIODE,ZENER HZT33(TP) HITACHI
ZD102	0DZ330009BA	DIODE,ZENER HZT33(TP) HITACHI
ZD105	0DZ910009AJ	DIODE,ZENER MTZJ9.1B TP ROHM-K
ZD403	0DZ510009BF	DIODE,ZENER GDZ5.1B TP GRADE
ZD650	0DZ620009BB	DIODE,ZENER MTZJ6.2B TP ROHM-K DO34 0.5W
ZD901	0DZ180009BE	DIODE,ZENER GDZJ18B TP GRANDE DO34 0.5W
ZD1201	0DZ121109AA	DIODE,ZENER DTZ12BTT11(CHIP) TP ROHM
<b>TRANSISTOR</b>		
Q15	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q16	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q18	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q101	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q102	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q103	0TR733009AA	TR,KSC733C-Y TP SAMSUNG
Q104	0TR127009AA	TR,KTA1270-TP-Y (KTA562TM)KEC

For Capacitor & Resistors,  
the characters at 2nd and 3rd  
digit in the P/No. means as  
follows;

CC, CX, CK, CN : Ceramic  
CQ : Polyester  
CE : Electrolytic

RD : Carbon Film  
RS : Metal Oxide Film  
RN : Metal Film  
RF : Fusible

The components identified by mark  $\Delta$  are  
critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
Q105	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q107	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q108	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q109	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q150	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q151	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q152	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q153	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q154	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q155	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q156	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q157	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q203	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q308	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q401	0TF200000AA	TR,IRFIBC20G BK I.R 600V - -
Q402	0TR544600AA	TR,2SC5446(AS) BK TOSHIBA TO3P 17
Q404	0TR127509AC	TR,KTA1275-Y TP(KTA1013),KEC
Q405	0TR205900AB	TR,KTD2059-Y TO-220IS KEC
Q601	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q602	0TR733009AA	TR,KSA733C-Y TP SAMSUNG TO-92
Q651	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q851	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q852	0TR322709AA	TR,KTC3227-Y,TP(KTC1627A),KEC
Q853	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q854	0TR322709AA	TR,KTC3227-Y,TP(KTC1627A),KEC
Q855	0TR421009AB	TR,BF421
Q856	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q857	0TR320209AA	TR,KTC3202-TP-Y (KTC1959)KEC
Q871	0TR945009AA	TR,KSC945C-Y TP SAMSUNG
Q900	0TR127109AA	TR,KTA1271-TP-Y (KTA950)KEC
Q1107	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1108	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1109	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q1110	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1111	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1112	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q1113	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1114	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1115	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q1116	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1117	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1118	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q1119	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1120	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q1121	0TR150400BA	TR,CHIP 2SA1504S(ASY) KEC
Q1270	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1271	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1272	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1273	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1274	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1275	0TR387500AA	TR,CHIP 2SC3875S(ALY) KEC
Q1501	0TR945009AA	TR,KSC945C-Y TP SAMSUNG

LOCA. NO	PART NO	DESCRIPTION
Q2902	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q2907	0TR126609AA	TR,KTA1266-TP-Y (KTA1015) KEC
Q2908	0TR319809AA	TR,KTC3198-TP-Y (KTC1815)KEC
Q2909	0TR165900AC	TR,KTA1659A-Y TO-220IS BK KEC - -
Q2910	0TR437000BA	TR,KTC4370A-Y TO-220IS KEC
<b>CAPACITOR</b>		
C10	a0CE106DF618	10UF STD 16V M FL TP5
C11	0CE106DF618	10UF STD 16V M FL TP5
C12	0CQ1041N509	0.1U 100V K POLY
C13	0CE476DF618	47UF STD 16V M FL TP5
C14	0CN1030F679	10000P 16V M Y TA52
C15	0CE106DF618	10UF STD 16V M FL TP5
C16	0CN1030F679	10000P 16V M Y TA52
C17	0CN1010K519	100P 50V K B TA52
C19	0CN1030F679	10000P 16V M Y TA52
C20	0CE476DD618	47UF STD 10V 20% FL TP 5
C21	0CE106DF618	10UF STD 16V M FL TP5
C22	0CN1030F679	10000P 16V M Y TA52
C23	0CN1010K519	100P 50V K B TA52
C24	0CE106DF618	10UF STD 16V M FL TP5
C25	0CN1020K519	1000P 50V K B TA52
C26	0CX3300K409	33P 50V J SL TA52
C27	0CX3300K409	33P 50V J SL TA52
C29	0CN1030F679	10000P 16V M Y TA52
C30	0CE106DF618	10UF STD 16V M FL TP5
C31	0CE106DF618	10UF STD 16V M FL TP5
C32	0CN1030F679	10000P 16V M Y TA52
C33	0CN1030F679	10000P 16V M Y TA52
C36	0CE476DD618	47UF STD 10V 20% FL TP 5
C37	0CN1030F679	10000P 16V M Y TA52
C38	0CE106DF618	10UF STD 16V M FL TP5
C41	0CN1030F679	10000P 16V M Y TA52
C42	0CN1030F679	10000P 16V M Y TA52
C80	0CE227DF618	220UF STD 16V M FL TP5
C81	0CE227DF618	220UF STD 16V M FL TP5
C82	0CE227DD618	220UF STD 10V M FL TP5
C83	0CE227DD618	220UF STD 10V M FL TP5
C102	0CE106DK618	10UF STD 50V M FL TP5
C103	0CN1030F679	10000P 16V M Y TA52
C104	0CE476DD618	47UF STD 10V 20% FL TP 5
C108	0CN1030F679	10000P 16V M Y TA52
C109	0CE105DK618	1UF STD 50V M FL TP5
C111	0CE017DD618	100UF STD 10V M
C114	0CE476DD618	47UF STD 10V 20% FL TP 5
C115	0CN1010K519	100P 50V K B TA52
C117	0CE476DD618	47UF STD 10V 20% FL TP 5
C121	0CE474DK618	0.4700UF STD 50V M FL TP5
C122	0CE017DD618	100UF STD 10V M
C123	0CN1030F679	10000P 16V M Y TA52
C124	0CE106DF618	10UF STD 16V M FL TP5
C127	0CE476DD618	47UF STD 10V 20% FL TP 5

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LOCA. NO	PART NO	DESCRIPTION
C129	0CE106DK618	10UF STD 50V M FL TP5
C150	0CN1010K519	100P 50V K B TA52
C151	0CN2210K519	220P 50V K B TA52
C152	0CE476DF618	47UF STD 16V M FL TP5
C153	0CN1040K949	0.1M 50V Z F TA52
C154	0CE105DK618	1UF STD 50V M FL TP5
C203	0CN1010K519	100P 50V K B TA52
C204	0CN1010K519	100P 50V K B TA52
C206	0CE227DD618	220UF STD 10V M FL TP5
C207	0CE226DF618	22UF STD 16V M FL TP5
C208	0CE226DF618	22UF STD 16V M FL TP5
C212	0CN4710K519	470P 50V K B TA52
C213	0CN4710K519	470P 50V K B TA52
C214	0CN2710K519	270P 50V K B TA52
C215	0CN1010K519	100P 50V K B TA52
C216	0CN1010K519	100P 50V K B TA52
C218	0CE227DD618	220UF STD 10V M FL TP5
C221	0CN2710K519	270P 50V K B TA52
C225	0CN4710K519	470P 50V K B TA52
C226	0CN4710K519	470P 50V K B TA52
C227	0CN1010K519	100P 50V K B TA52
C228	0CE226DF618	22UF STD 16V M FL TP5
C229	0CE226DF618	22UF STD 16V M FL TP5
C232	0CN4710K519	470P 50V K B TA52
C233	0CN1010K519	100P 50V K B TA52
C234	0CN4710K519	470P 50V K B TA52
C237	0CN1030F679	10000P 16V M Y TA52
C238	0CN1010K519	100P 50V K B TA52
C239	0CN1010K519	100P 50V K B TA52
C306	0CN1030F679	10000P 16V M Y TA52
C307	0CN1030F679	10000P 16V M Y TA52
C308	0CQ4741N501	0.47U 100V K POLY F5
C310	0CE107DJ618	100UF STD 35V M FL TP5
C312	0CN2710K519	270P 50V K B TA52
C313	0CQ3331N509	0.033U 100V K POLY TP
C316	0CE228DJ650	2200UF STD 35V M FM7.5 BULK
C324	0CQ3331N509	0.033U 100V K POLY TP
C332	0CQ1021N519	0.001U 100V K POLY NI TP
C333	0CN2710K519	270P 50V K B TA52
C338	0CE228DH610	2200UF STD 25V M FL BULK
C339	0CK56101515	560P 1KV K B TS
C340	181-014W	MPP 2KV 0.0033UF J
C348	0CE3386H610	3300UF SMS,SG 25V 20% FL BULK
C350	0CK56101515	560P 1KV K B TS
C401	181-091D	DE0905-979 R 102K 1KV TP5
C402	181-091D	DE0905-979 R 102K 1KV TP5
C403	0CK22101515	220P 1KV K B TP5
C404	181-010A	PP 400V 0.022UF J
C405	0CB10212474	1000PF D 2KV J M/PP NI FM20
C406	0CK10201515	1000P 1KV K B TS
C407	181-014C	MPP 1600V 0.0056UF J
C408	181-014B	MPP 1600V 0.0047UF J

LOCA. NO	PART NO	DESCRIPTION
C409	181-010G	PP 400V 0.01UF K
C410	181-010G	PP 400V 0.01UF K
C411	0CE106DR618	10UF STD 250V M FL TP5
C412	181-013M	MPP 400V 0.22UF J
C413	181-013U	MPP 630V 0.1UF J
C416	0CE107DK618	100UF STD 50V M FL TP5
C417	0CK1030K945	0.01UF 50V Z F TR
C418	0CN4710K519	470P 50V K B TA52
C419	0CN1030F679	10000P 16V M Y TA52
C420	0CN1010K519	100P 50V K B TA52
C422	0CE685BK652	6.8UF KME TYPE 50V 20% FM7.5 B
C423	0CE685BK652	6.8UF KME TYPE 50V 20% FM7.5 B
C426	0CQ6831N509	0.068U 100V K POLY TP
C430	0CK22202515	2200PF 2KV K B TR
C437	0CK56101515	560P 1KV K B TS
C438	0CE107DK618	100UF STD 50V M FL TP5
C439	0CQ1021N519	0.001U 100V K POLY NI TP
C446	0CK56102515	560P 2KV K B TS
C601	0CE475DK618	4.7UF STD 50V 20% FL TP 5
C602	0CN3320F569	3300P 16V K X TA52
C603	0CN3320F569	3300P 16V K X TA52
C604	0CN2210K519	220P 50V K B TA52
C605	0CN1520F569	1500P 16V K X TA52
C606	0CE106DF618	10UF STD 16V M FL TP5
C607	0CE106DF618	10UF STD 16V M FL TP5
C608	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.3
C609	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.3
C610	0CE106DF618	10UF STD 16V M FL TP5
C611	0CN1030F679	10000P 16V M Y TA52
C612	0CN1030F679	10000P 16V M Y TA52
C613	0CE107DD618	100UF STD 10V M FL TP5
C614	0CN1030F679	10000P 16V M Y TA52
C615	0CX5600K409	56P 50V J SL TA52
C616	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.3
C617	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.3
C618	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.3
C619	181-007G	MPE ECQ-V1H334JL3(TR), 50V 0.3
C620	181-442Z	PE,ECQ-B1H104KF3(TR)
C621	0CN1030F679	10000P 16V M Y TA52
C622	0CN1020K519	1000P 50V K B TA52
C623	0CE106DF618	10UF STD 16V M FL TP5
C624	0CX5600K409	56P 50V J SL TA52
C625	0CX5600K409	56P 50V J SL TA52
C626	0CX5600K409	56P 50V J SL TA52
C627	0CN4710K519	470P 50V K B TA52
C628	0CX0100K619	1P 50V M C TA52
C629	0CX0100K619	1P 50V M C TA52
C630	0CN1030F679	10000P 16V M Y TA52
C631	0CE476DD618	47UF STD 10V 20% FL TP 5
C632	0CE476DF618	47UF STD 16V M FL TP5
C633	0CN2720F569	2700P 16V K X TA52
C634	0CN2720F569	2700P 16V K X TA52



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LOCA. NO	PART NO	DESCRIPTION
C635	0CN2720F569	2700P 16V K X TA52
C636	0CN2720F569	2700P 16V K X TA52
C637	0CN1030F679	10000P 16V M Y TA52
C638	0CN1030F679	10000P 16V M Y TA52
C639	181-442Z	PE,ECQ-B1H104KF3(TR)
C640	181-442Z	PE,ECQ-B1H104KF3(TR)
C641	0CN1020K519	1000P 50V K B TA52
C642	0CN1020K519	1000P 50V K B TA52
C643	0CE107DF618	100UF STD 16V M FL TP5
C644	0CE107DF618	100UF STD 16V M FL TP5
C645	0CE107DF618	100UF STD 16V M FL TP5
C646	0CE107DF618	100UF STD 16V M FL TP5
C648	0CN1030F679	10000P 16V M Y TA52
C649	0CN1040K949	0.1M 50V Z F TA52
C650	0CE108DH618	1000UF STD 25V M FL TP5
C651	0CN2230H949	22000P 25V Z FTA52
C652	0CQ2242K439	0.2200UF S 50V J M/PE NI TP
C653	0CN3320F569	3300P 16V K X TA52
C654	0CN1030F679	10000P 16V M Y TA52
C655	0CQ2242K439	0.2200UF S 50V J M/PE NI TP
C656	0CN3320F569	3300P 16V K X TA52
C657	0CE476DD618	47UF STD 10V 20% FL TP 5
C660	0CN1220F569	1200P 16V K X TA52
C661	0CN1220F569	1200P 16V K X TA52
C680	0CN1040K949	0.1M 50V Z F TA52
C803	181-091G	DE0907-486 R 471K 2KV TP7.5
C806	181-014Y	MPP 1.6KV 0.0015UF J
C807	181-091C	DE0705-979 R 471K 1KV TP5
C808	0CE107BJ618	100UF KME 35V M FL TP5
C809	0CK1020K515	1000P 50V K B TS
C811	181-120K	2200PF 4KV M E FMTW LEAD 4.5
C812	0CK1020W515	1000P 500V K B TS
$\Delta$ C813	181-091D	DE0905-979 R 102K 1KV TP5
C814	0CQZVBK002A	A.C 275V 0.1UF M (S=15)
C815	181-091C	DE0705-979 R 471K 1KV TP5
C816	181-091D	DE0905-979 R 102K 1KV TP5
C821	181-001Y	330UF 0 450V M VNSN BULK
C824	0CQZVBK002C	A.C 275V 0.22UF K (S=22.5)
C851	0CK1020W515	1000P 500V K B TS
$\Delta$ C853	0CE477DF618	470UF STD 16V 20% FL TP 5
C854	0CE107DF618	100UF STD 16V M FL TP5
C855	0CE107DD618	100UF STD 10V M FL TP5
C856	181-091C	DE0705-979 R 471K 1KV TP5
C857	0CE228DF618	2200UF STD 16V M FL TP5
C858	0CE477DF618	470UF STD 16V 20% FL TP 5
C859	181-091C	DE0705-979 R 471K 1KV TP5
C860	0CE477DF618	470UF STD 16V 20% FL TP 5
C861	0CE228DF618	2200UF STD 16V M FL TP5
C862	0CE475CK636	4.7UF SHL,SD 50V 20% FM5 BP(D)
C863	181-091C	DE0705-979 R 471K 1KV TP5
C864	0CE108DH618	1000UF STD 25V M FL TP5
C866	0CK4710K515	470PF 50V K B TR

LOCA. NO	PART NO	DESCRIPTION
C867	0CE107DN618	100UF STD 100V M FL TP5
C870	181-091D	DE0905-979 R 102K 1KV TP5
C871	0CE227DP650	220UF STD 160V M FM7.5 BULK
C872	0CE107CP618	100U SHL 160V M FL TP5
C873	0CQ1041N509	0.1U 100V K POLY TP
C900	0CE475BR618	4.7UF KME TYPE 250V 20% FL TP
C901	0CE475BR618	4.7UF KME TYPE 250V 20% FL TP
C902	0CE475DR618	4.7UF STD 250V 20% FL TP 5
C903	0CC0500K115	5P 50V D NP0 TS
C904	0CE475BR618	4.7UF KME TYPE 250V 20% FL TP
C905	0CK5610W515	560P 500V K B TS
C906	0CN1040K949	0.1M 50V Z F TA52
C907	0CN1040K949	0.1M 50V Z F TA52
C910	0CE225DK618	2.2UF STD 50V 20% FL TP 5
C911	0CN1040K949	0.1M 50V Z F TA52
C912	0CN1040K949	0.1M 50V Z F TA52
C914	0CE228DF618	2200UF STD 16V M FL TP5
C915	0CK5610W515	560P 500V K B TS
C916	181-033T	2KV B 222K TP7.5
C917	0CN1040K949	0.1M 50V Z F TA52
C918	0CC0500K115	5P 50V D NP0 TS
C919	0CK5610W515	560P 500V K B TS
C920	0CC5600K415	56P 50V J NP0 TP
C925	0CN1040K949	0.1M 50V Z F TA52
C927	0CC4700K415	47P 50V J NP0 TP
C928	0CC3300K415	33P 50V J NP0 TP
C1002	0CN4710K519	470P 50V K B TA52
C1003	0CN4710K519	470P 50V K B TA52
C1005	0CN2210K519	220P 50V K B TA52
C1006	0CN2210K519	220P 50V K B TA52
C1007	0CN4710K519	470P 50V K B TA52
C1008	0CN4710K519	470P 50V K B TA52
C1100	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1101	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1102	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1103	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1104	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1105	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1109	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1116	0CE474CK636	0.47UF SHL,SD 50V M FM5 BP(D)
C1119	0CE474CK636	0.47UF SHL,SD 50V M FM5 BP(D)
C1120	0CE474CK636	0.47UF SHL,SD 50V M FM5 BP(D)
C1121	0CE476DF618	47UF STD 16V M FL TP5
C1127	0CE106DF618	10UF STD 16V M FL TP5
C1131	0CQ1021N519	0.001U 100V K POLY NI TP
C1134	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1135	0CE476DF618	47UF STD 16V M FL TP5
C1138	0CE107DF618	100UF STD 16V M FL TP5
C1140	0CE336DF618	33UF STD 16V M FL TP5
C1144	0CE106DF618	10UF STD 16V M FL TP5
C1146	0CE106DF618	10UF STD 16V M FL TP5
C1147	0CE227DF618	220UF STD 16V M FL TP5

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LOCA. NO	PART NO	DESCRIPTION
C1159	0CE105DK618	1UF STD 50V M FL TP5
C1169	0CE105DK618	1UF STD 50V M FL TP5
C1170	0CE476DF618	47UF STD 16V M FL TP5
C1172	0CE476DF618	47UF STD 16V M FL TP5
C1181	0CE106DF618	10UF STD 16V M FL TP5
C1187	0CE476DF618	47UF STD 16V M FL TP5
C1195	0CE476DD618	47UF STD 10V 20% FL TP 5
C1196	0CE227DD618	220UF STD 10V M FL TP5
C1198	0CE476DF618	47UF STD 16V M FL TP5
C1222	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1223	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1224	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1228	0CE476DF618	47UF STD 16V M FL TP5
C1233	0CE335DK618	3.3UF STD 50V 20% FL TP 5
C1234	0CE476DD618	47UF STD 10V 20% FL TP 5
C1242	0CE106DF618	10UF STD 16V M FL TP5
C1258	0CE106DF618	10UF STD 16V M FL TP5
C1270	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1271	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1272	0CK224DF56A	220000PF 2012 16V 10% R/TP X7R
C1502	0CE107DD618	100UF STD 10V M FL TP5
C1504	0CE107DD618	100UF STD 10V M FL TP5
C2903	0CE106DH618	10UF STD 25V M FL TP5
C2909	0CE106DH618	10UF STD 25V M FL TP5
C2910	0CN1010K519	100P 50V K B TA52
C2911	0CN1010K519	100P 50V K B TA52
C2912	0CK4720W510	4700P 500V K B S
C2913	0CK4720W510	4700P 500V K B S
C2914	0CE106DP618	10UF STD 160V M FL TP5
C2915	0CE107DK618	100UF STD 50V M FL TP5
C2917	0CE107DF618	100UF STD 16V M FL TP5
C2918	0CE107DF618	100UF STD 16V M FL TP5
C2919	0CE106DP618	10UF STD 160V M FL TP5
C2922	0CE106DH618	10UF STD 25V M FL TP5
C2933	0CK1010W515	100P 500V K B TS
J6553	0CN1030F679	10000P 16V M Y TA52

### COIL & TRANSFORMER

L11	0LA0102K119	INDUCTOR,10UH K
L12	0LA0102K119	INDUCTOR,10UH K
L13	0LA0102K119	INDUCTOR,10UH K
L14	0LA0102K119	INDUCTOR,10UH K
L15	0LA0102K119	INDUCTOR,10UH K
L72	0LA0102K119	INDUCTOR,10UH K
L101	0LA0102K139	INDUCTOR,10UH K
L102	0LA0102K139	INDUCTOR,10UH K
L105	0LA1000K119	INDUCTOR,100UH K
L201	0LA0102K119	INDUCTOR,10UH K
L204	0LA0102K119	INDUCTOR,10UH K
L205	0LA0102K119	INDUCTOR,10UH K
L206	0LA0102K119	INDUCTOR,10UH K
L207	0LA0102K119	INDUCTOR,10UH K

LOCA. NO	PART NO	DESCRIPTION
L209	0LA0102K119	INDUCTOR,10UH K
L211	0LA0102K119	INDUCTOR,10UH K
L213	0LA0102K119	INDUCTOR,10UH K
L215	0LA0102K119	INDUCTOR,10UH K
L301	150-C02A	COIL,CHOKE 10UH R0814
L401	150-L02Q	COIL,LINEARITY 10UH
L402	150-C13B	COIL,CHOKE 52UH
L403	150-C13B	COIL,CHOKE 52UH
L407	150-717K	COIL,CHOKE 1.1UH
L601	0LA0102K119	INDUCTOR,10UH K
L603	0LA0102K119	INDUCTOR,10UH K
L604	0LA0102K119	INDUCTOR,10UH K
L605	0LA0102K119	INDUCTOR,10UH K
L850	6170VZ0008A	TRANSFORMER,TS4841 30500UH
L853	150-C02F	COIL,CHOKE 82UH R1217
L901	0LA0272K139	INDUCTOR,27UH K
L1000	0LA0102K119	INDUCTOR,10UH K
L1001	0LA0102K119	INDUCTOR,10UH K
L1002	0LA0472K119	INDUCTOR,47UH K
L1003	0LA0472K119	INDUCTOR,47UH K
L1004	0LA1000K119	INDUCTOR,100UH K
L1005	0LA1000K119	INDUCTOR,100UH K
L1102	0LA0102K139	INDUCTOR,10UH K
L1104	0LA0102K119	INDUCTOR,10UH K
L1107	0LA0102K139	INDUCTOR,10UH K
L1501	0LA0102K119	INDUCTOR,10UH K
$\Delta$ T401	6170VC0002A	TRANSFORMER,H-DRIVE EER-2619
$\Delta$ T402	6174V-6003E	FBT,BSC27-N2215 29"
$\Delta$ T403	151-E06A	TRANSFORMER,EER2834 0UH
$\Delta$ T802	6170VMCB01H	TRANSFORMER,SMPS EER5345 295UH
$\Delta$ T803	151-D02G	TRANSFORMER,STAND-BY EER3541 0UH

### CONNECTOR

P11A	366-921K	CONNECTOR (CIRC),2.5MM 11P
P11B	6631V25024D	CONNECTOR ASSY,11P 250MM
P12	366-932B	CONNECTOR (CIRC),2.5MM 3P
P72	366-932B	CONNECTOR (CIRC),2.5MM 3P
P101	366-932E	CONNECTOR (CIRC),2.5MM 6P
P402	366-043K	CONNECTOR (CIRC),PLUG(4P)
P501B	366-173N	CONNECTOR (CIRC),AEPH254-D28R(14*2)
P502B	366-173G	CONNECTOR (CIRC),2.5MM 8*2P
P503B	366-173G	CONNECTOR (CIRC),2.5MM 8*2P
P601A	366-921F	CONNECTOR (CIRC),2.5MM 7P
P601B	387-A07K	CONNECTOR ASSY,7P(L=600)
P650	366-932C	CONNECTOR (CIRC),2.5MM 4P
P651	366-932B	CONNECTOR (CIRC),2.5MM 3P
P801A	366-921L	CONNECTOR (CIRC),2.5MM 12P
P801B	387-A15K	CONNECTOR ASSY,12P(L=600)
P802A	366-932D	CONNECTOR (CIRC),2.5MM 5P
P802B	387-A05A	CONNECTOR ASSY,5P (L=100)
P803A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P803B	366-009D	CONNECTOR (CIRC),2.36PAI 1P

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CQ : Polyester  
CE : Electrolytic

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RF : Fusible

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Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
P822A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P822B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P901B	366-921L	CONNECTOR (CIRC),2.5MM 12P
P901A	366-921L	CONNECTOR (CIRC),2.5MM 12P
P902A	366-921J	CONNECTOR (CIRC),2.5MM 10P
P902B	387-A10G	CONNECTOR ASSY,10P (L=400)
P905	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P906	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P1201B	366-921E	CONNECTOR (CIRC),2.5MM 6P
P1201A	387-B06J	CONNECTOR ASSY,6P SHIELD WIRE (L=500)
P1511	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P1512B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P1512A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P1513A	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P1513B	366-009D	CONNECTOR (CIRC),2.36PAI 1P
P1513	6631V23001J	CONNECTOR ASSY,2P 250MM 10MM
P2903	366-932B	CONNECTOR (CIRC),2.5MM 3P
<b>RESISTOR</b>		
F851	0RP0020J809	0.02 OHM 1W 20% TA52
F853	0RP0050H709	0.05 OHM 1/2W 10% TA52
F855	0RP0050H709	0.05 OHM 1/2W 10% TA52
FB854	0RF0470H609	0.47 OHM 1/2 W 5.00% TA52
FR359	0RF0680K607	0.68 OHM 2 W 5.00% TA62
$\Delta$ FR360	0RF0680K607	0.68 OHM 2 W 5.00% TA62
FR443	0RF0101H609	1 OHM 1/2 W 5.00% TA52
FR448	0RF0470K607	0.47 OHM 2 W 5.00% TA62
FR2948	0RF1000H609	100 OHM 1/2 W 5.00% TA52
J105	0RD4700F609	470 OHM 1/6W 5
J229	0RD3300F609	330OHM 1/6W 5
R11	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R12	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R13	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R14	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R15	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R16	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R17	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R18	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R19	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R20	0RD5602F609	56K OHM 1/6 W 5.00% TA52
R21	0RD5602F609	56K OHM 1/6 W 5.00% TA52
R22	0RD3302F609	33K OHM 1/6 W 5.00% TA52
R23	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R24	0RD3302F609	33K OHM 1/6 W 5.00% TA52
R25	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R26	0RD3901F609	3.9K OHM 1/6 W 5.00% TA52
R27	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R28	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R29	0RD1200F609	120 OHM 1/6 W 5.00% TA52
R30	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R31	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R32	0RD1000F609	100 OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R33	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R34	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R35	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R36	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R38	0RD6802F609	68K OHM 1/6 W 5.00% TA52
R39	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R40	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R41	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R42	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R43	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R44	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R45	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R46	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R47	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R48	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R49	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R50	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R51	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R52	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R53	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R54	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R56	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R57	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R58	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R59	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R60	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R61	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R62	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R63	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R64	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R65	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R66	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R67	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R68	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R70	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R71	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R74	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R75	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R76	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R80	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R81	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R82	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R84	0RD2002F609	20K OHM 1/6 W 5.00% TA52
R85	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R87	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R88	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R101	0RD1200F609	120 OHM 1/6 W 5.00% TA52
R102	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R103	0RS1801H609	1.8K OHM 1/2 W 5.00% TA52
R105	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R107	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R108	0RD1000F609	100 OHM 1/6 W 5.00% TA52

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LOCA. NO	PART NO	DESCRIPTION
R109	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R110	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R111	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R112	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R113	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R114	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R115	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R116	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R117	0RD2201F609	2.2K OHM 1/6 W 5.00% TA52
R119	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R120	0RD1300F609	130 OHM 1/6 W 5.00% TA52
R125	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R126	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R127	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R128	0RD0222F609	22 OHM 1/6 W 5.00% TA52
R129	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R130	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R131	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R132	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R133	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R134	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R135	0RS1801H609	1.8K OHM 1/2 W 5.00% TA52
R136	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R137	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R138	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R150	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R151	0RD3002F609	30K OHM 1/6 W 5.00% TA52
R152	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R153	0RD1003F609	100K OHM 1/6 W 5.00% TA52
R154	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R155	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R156	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R157	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R158	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R159	0RD5103F609	510K OHM 1/6 W 5.00% TA52
R160	0RD5602F609	56K OHM 1/6 W 5.00% TA52
R161	0RD5602F609	56K OHM 1/6 W 5.00% TA52
R162	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R163	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R203	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R205	0RD2200F609	220 OHM 1/6 W 5.00% TA52
R211	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R216	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R217	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R218	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R219	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R221	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R224	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R225	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R311	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R312	0RD2202F609	22K OHM 1/6 W 5.00% TA52
R313	0RD1001F609	1K OHM 1/6 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R314	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R318	0RS0331K619	3.3 OHM 2 W 5% TR
R324	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R326	0RN1801F409	1.8K OHM 1/6 W 1.00% TA52
R327	0RN1801F409	1.8K OHM 1/6 W 1.00% TA52
R328	0RS2200K607	220 OHM 2 W 5.00% TA62
R329	0RN0271J607	2.7 OHM 1 W 5.00% TA62
R330	0RN0151J607	1.5 OHM 1 W 5.00% TA62
R401	0RD1002F609	10K OHM 1/6 W 5.00% TA52
R402	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R403	0RS1001K619	1K OHM 2 W 5% TR
R404	0RS4701K619	4.7K OHM 2 W 5% TR
R405	180-A01B	RW ROUND G 2W 0.11 K TA31(63)
R406	0RS0561K619	5.6 OHM 2 W 5% TR
R407	0RS1001K607	1K OHM 2 W 5.00% TA62
R408	0RD3301A609	3.3K OHM 1/2 W(7.0) 5.00% TA52
R410	0RD3301F609	3.3K OHM 1/6 W 5.00% TA52
R413	0RN4701F409	4.7K OHM 1/6 W 1.00% TA52
R414	0RD6802F609	68K OHM 1/6 W 5.00% TA52
R415	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R416	0RN5602F409	56K OHM 1/6 W 1.00% TA52
R417	0RD4700F609	470 OHM 1/6 W 5.00% TA52
R418	0RD2001A609	2K OHM 1/2 W(7.0) 5.00% TA52
R419	0RN1501F409	1.5K OHM 1/6 W 1.00% TA52
R420	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R421	0RD0221F609	2.2 OHM 1/6 W 5.00% TA52
R422	0RD1001A609	1K OHM 1/2 W(7.0) 5.00% TA52
R423	0RD2701A609	2.7K OHM 1/2 W(7.0) 5.00% TA52
R424	0RS0561K607	5.6 OHM 2 W 5.00% TA62
R425	0RD2400A609	240 OHM 1/2 W(7.0) 5.00% TA52
R426	0RD1000A609	100 OHM 1/2 W(7.0) 5.00% TA52
R450	0RD0221A609	2.2 OHM 1/2 W(7.0) 5.00% TA52
R451	180-C02M	5.6K OHM 1/2 W 10% TA52 ERC12G
R490	180-B01E	RS RECT S 5W 15K J DOUBLE
R601	0RD3602F609	36K OHM 1/6 W 5.00% TA52
R602	0RD3602F609	36K OHM 1/6 W 5.00% TA52
R605	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R606	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R607	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R608	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R609	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R610	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R611	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R612	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R613	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R614	0RD3302F609	33K OHM 1/6 W 5.00% TA52
R615	0RD3302F609	33K OHM 1/6 W 5.00% TA52
R616	0RD1501F609	1.5K OHM 1/6 W 5.00% TA52
R617	0RD1501F609	1.5K OHM 1/6 W 5.00% TA52
R618	0RD0471F609	4.7 OHM 1/6 W 5.00% TA52
R619	0RD0471F609	4.7 OHM 1/6 W 5.00% TA52
R620	0RD0271F609	2.7 OHM 1/6 W 5.00% TA52

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LOCA. NO	PART NO	DESCRIPTION
R621	0RD0271F609	2.7 OHM 1/6 W 5.00% TA52
R623	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R624	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R650	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R651	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R653	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R654	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R657	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R661	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R662	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R663	0RD1102F609	11K OHM 1/6 W 5.00% TA52
R803	0RD0222A609	22 OHM 1/2 W(7.0) 5.00% TA52
$\Delta$ R804	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R805	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R806	180-A01P	0.13 OHM 2 W 5% TA62 RWR
$\Delta$ R807	0RKZVTA001C	8.2M OHM 1/2 W 5% TA52 UL PILK
R808	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R809	0RS4702K619	47K OHM 2 W 5% TR
$\Delta$ R813	0RKZVTA001K	0.47M OHM 1/2 W 5% TA52 PILKOR
R852	0RS0682K607	68 OHM 2 W 5.00% TA62
R853	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R854	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R855	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R856	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R858	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R860	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R861	0RD2001F609	2K OHM 1/6 W 5.00% TA52
"	0RD1501F609	1.5K OHM 1/6 W 5.00% TA52 *RL-
R862	0RD7501F609	7.5K OHM 1/6 W 5.00% TA52
R863	0RD2001F609	2K OHM 1/6 W 5.00% TA52
R869	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R870	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R871	0RD2701F609	2.7K OHM 1/6 W 5.00% TA52
R872	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R873	0RD4702F609	47K OHM 1/6 W 5.00% TA52
R902	0RD9101F609	9.1K OHM 1/6 W 5.00% TA52
R903	0RS5602K607	56K OHM 2 W 5.00% TA62
R905	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R907	0RS5602K607	56K OHM 2 W 5.00% TA62
R908	0RS4700H609	470 OHM 1/2 W 5.00% TA52
R909	0RN6201F409	6.2K OHM 1/6 W 1.00% TA52
R910	0RF0181K607	1.8 OHM 2 W 5.00% TA62
R912	0RN3301F409	3.3K OHM 1/6 W 1.00% TA52
R913	0RN3301F409	3.3K OHM 1/6 W 1.00% TA52
R914	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R915	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R917	0RD1803H609	180K OHM 1/2 W 5.00% TA52
R918	0RS5602K607	56K OHM 2 W 5.00% TA62
R921	0RN1001F409	1K OHM 1/6 W 1.00% TA52
R929	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R930	0RS4700H609	470 OHM 1/2 W 5.00% TA52
R938	0RS4700H609	470 OHM 1/2 W 5.00% TA52

LOCA. NO	PART NO	DESCRIPTION
R946	0RD1001F609	1K OHM 1/6 W 5.00% TA52
R947	0RD2401F609	2.4K OHM 1/6 W 5.00% TA52
R1002	0RD2403F609	240K OHM 1/6 W 5.00% TA52
R1003	0RD2403F609	240K OHM 1/6 W 5.00% TA52
R1005	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R1006	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R1007	0RD0752F609	75 OHM 1/6 W 5.00% TA52
R1501	0RD0472F609	47 OHM 1/6 W 5.00% TA52
R1502	0RD3300F609	330 OHM 1/6 W 5.00% TA52
R1503	0RD1801F609	1.8K OHM 1/6 W 5.00% TA52
R1504	0RD4701F609	4.7K OHM 1/6 W 5.00% TA52
R2906	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R2907	0RD1600F609	160 OHM 1/6 W 5.00% TA52
R2908	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R2909	0RD1500F609	150 OHM 1/6 W 5.00% TA52
R2910	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R2911	0RD5601F609	5.6K OHM 1/6 W 5.00% TA52
R2912	0RD3001F609	3K OHM 1/6 W 5.00% TA52
R2921	0RD3000H609	300 OHM 1/2 W 5.00% TA52
R2922	0RD3000H609	300 OHM 1/2 W 5.00% TA52
R2928	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R2929	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R2930	0RD0102F609	10 OHM 1/6 W 5.00% TA52
R2931	0RD1000F609	100 OHM 1/6 W 5.00% TA52
R2932	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R2933	0RD0822F609	82 OHM 1/6 W 5.00% TA52
R2934	0RF0102J607	10 OHM 1 W 5.00% TA62
R2935	0RD1202H609	12K OHM 1/2 W 5.00% TA52
R2936	0RD2001H609	2K OHM 1/2 W 5.00% TA52
R2937	0RD5602H609	56K OHM 1/2 W 5.00% TA52
R2938	0RD5602H609	56K OHM 1/2 W 5.00% TA52
R2939	0RD1201H609	1.2K OHM 1/2 W 5.00% TA52
R2940	0RD1501H609	1.5K OHM 1/2 W 5.00% TA52
R2941	0RD1501H609	1.5K OHM 1/2 W 5.00% TA52
R2942	0RD0391H609	3.9 OHM 1/2 W 5.00% TA52
R2943	0RD0472H609	47 OHM 1/2 W 5.00% TA52
R2944	0RD0391H609	3.9 OHM 1/2 W 5.00% TA52
R2945	0RD0472H609	47 OHM 1/2 W 5.00% TA52
R2946	0RS8200J607	820 OHM 1 W 5.00% TA62
R2947	0RS8200J607	820 OHM 1 W 5.00% TA62
R2955	0RD2202H609	22K OHM 1/2 W 5.00% TA52
R2959	0RD5101F609	5.1K OHM 1/6 W 5.00% TA52
R2990	0RD0222F609	22 OHM 1/6 W 5.00% TA52
<b>SPARK GAP</b>		
SG904	6918VAX002H	SPARK GAP,WSP-122N 1200V -100V,+300V
SG911	6918VAX002D	SPARK GAP,WSP-301M 300V 20% AXIAL TYPE
SG912	6918VAX002D	SPARK GAP,WSP-301M 300V 20% AXIAL TYPE
SG913	6918VAX002D	SPARK GAP,WSP-301M 300V 20% AXIAL TYPE
<b>SWITCH</b>		
SW1501	140-315A	SWITCH,TACT SKHV17910B NON 12V

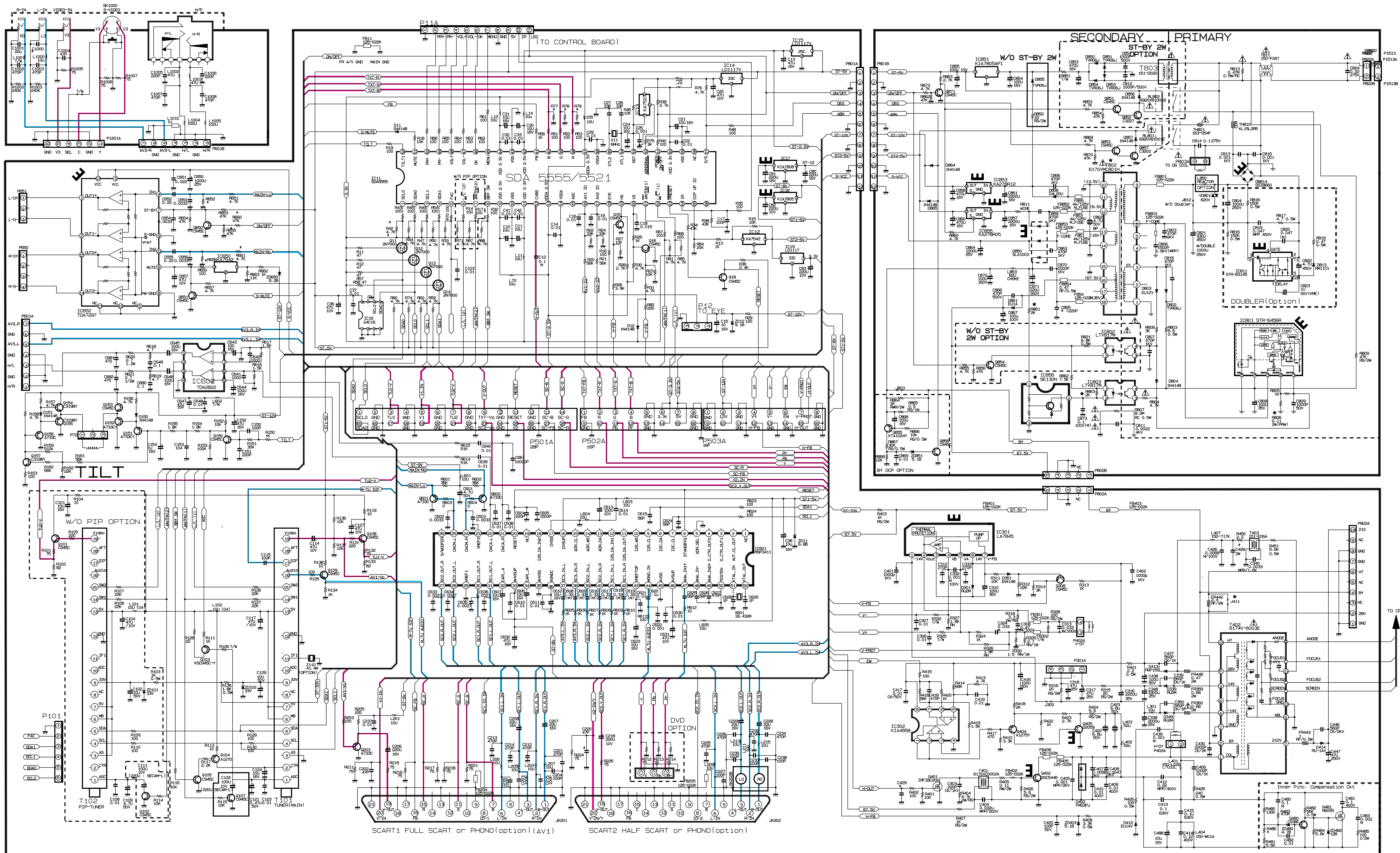
The components identified by mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

LOCA. NO	PART NO	DESCRIPTION
SW1502	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW1503	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW1504	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW1505	140-315A	SWITCH,TACT SKHV17910B NON 12V
SW1506	140-315A	SWITCH,TACT SKHV17910B NON 12V
$\Delta$ SW1511	6600VM2002A	SWITCH,PUSH SDKEA3 IEC 250V 8A HORIZO
<b>FILTER &amp; CRYSTAL</b>		
F854	125-022K	FILTER(CIRC),FERRITE 1UH
F1201	6200VKR001C	FILTER(CIRC),LPF 2EA H355LDJ-K5215
FB204	125-123A	FILTER(CIRC),FERRITE BFD3565R2F
FB301	125-022K	FILTER(CIRC),FERRITE 1UH
FB401	125-022K	FILTER(CIRC),FERRITE 1UH
FB403	125-022K	FILTER(CIRC),FERRITE 1UH
FB405	125-022K	FILTER(CIRC),FERRITE 1UH
FB406	125-022K	FILTER(CIRC),FERRITE 1UH
FB803	125-022K	FILTER(CIRC),FERRITE 1UH
FB852	125-022K	FILTER(CIRC),FERRITE 1UH
FB853	125-022K	FILTER(CIRC),FERRITE 1UH
FB902	125-022K	FILTER(CIRC),FERRITE 1UH
L103	125-022K	FILTER(CIRC),FERRITE 1UH
L1010	125-022K	FILTER(CIRC),FERRITE 1UH
T811	150-F06T	FILTER(CIRC),SQE3535 20MH
T1511	150-F09A	FILTER(CIRC),SQE2222 7-14MH 0.37PHY 48TURN
X11	156-A01L	RESONATOR,CRYSTAL HC49U SUNNY RADIAL 6.000MHZ
X601	156-A02M	RESONATOR,CRYSTAL HC49U KJE RADIAL 18.432MHZ
X1100	6202VDB007B	RESONATOR,CRYSTAL HC49U SUNNY RADIAL 20.250MHZ
X1101	6202VDB007B	RESONATOR,CRYSTAL HC49U SUNNY RADIAL 20.250MHZ
<b>ACCESSORIES</b>		
A1	3828VA0263L	MANUAL,OWNERS MK/REG/SPEC LG HU/EN 03
A2	6710V00032U	REMOTE CONTROLLER MC-017A W/PIP
A2	6710V00032V	REMOTE CONTROLLER MC-017A W/O PIP
B1	3890V01013A	BOX,RE-29FA31P.AUPLRH 29" NEW DWR2
<b>MISCELLANEOUS</b>		
$\Delta$ F1511	0FS4001B53C	FUSE,4000MA 250V 5.2X20 CY/CE
JK201	6612VMH001A	JACK,SCART UPJ-R1-018 RGB 21 PI
JK202	6613V00011A	JACK ASSY,PMJ018A 21P SCART+A/
PA1502	6726VV0006J	REMOTE CONTROLLER RECEIVER TSOP2238MQ1
$\Delta$ RL801	6920VB1001E	RELAY,SDT-S-105LMR OEG 5V 0.05A 250V
RL802	6920VB1001E	RELAY,SDT-S-105LMR OEG 5V 0.05A 250V
$\Delta$ SK900	6620VBD002A	SOCKET (CIRC),CPT PCS029A 9PIN 14/360
SK1000	6613V00004A	JACK ASSY,PJ6054A EARPHONE+S-VHS+3P
T101	6700VPF009N	TUNER,TAUL-M230D LGIT PAL DIN .
"	6700PF0001B	TUNER,TAUL-S210D
"	6700PF0001A	TUNER,TAUL-S210D LG PAL FS BG+LL
T102	6700VPF009P	TUNER,TAFL-M231P LGIT PAL PHONO .
"	6700PF0001B	TUNER,TAFL-S211P
$\Delta$ TH801	163-058D	THERMISTOR,PTC 03-07MX 7OHM 20%
TH810	163-048D	THERMISTOR,KL15L2R5 +/- 15% 125V
VD801	164-003K	VARISTOR,SVC621D-14A 620V 0% UL/C

LOCA. NO	PART NO	DESCRIPTION
VD1511	164-003K	VARISTOR,SVC621D-14A 620V 0% UL/C



# CIRCUIT DIAGRAM FOR MC017A CHASSIS



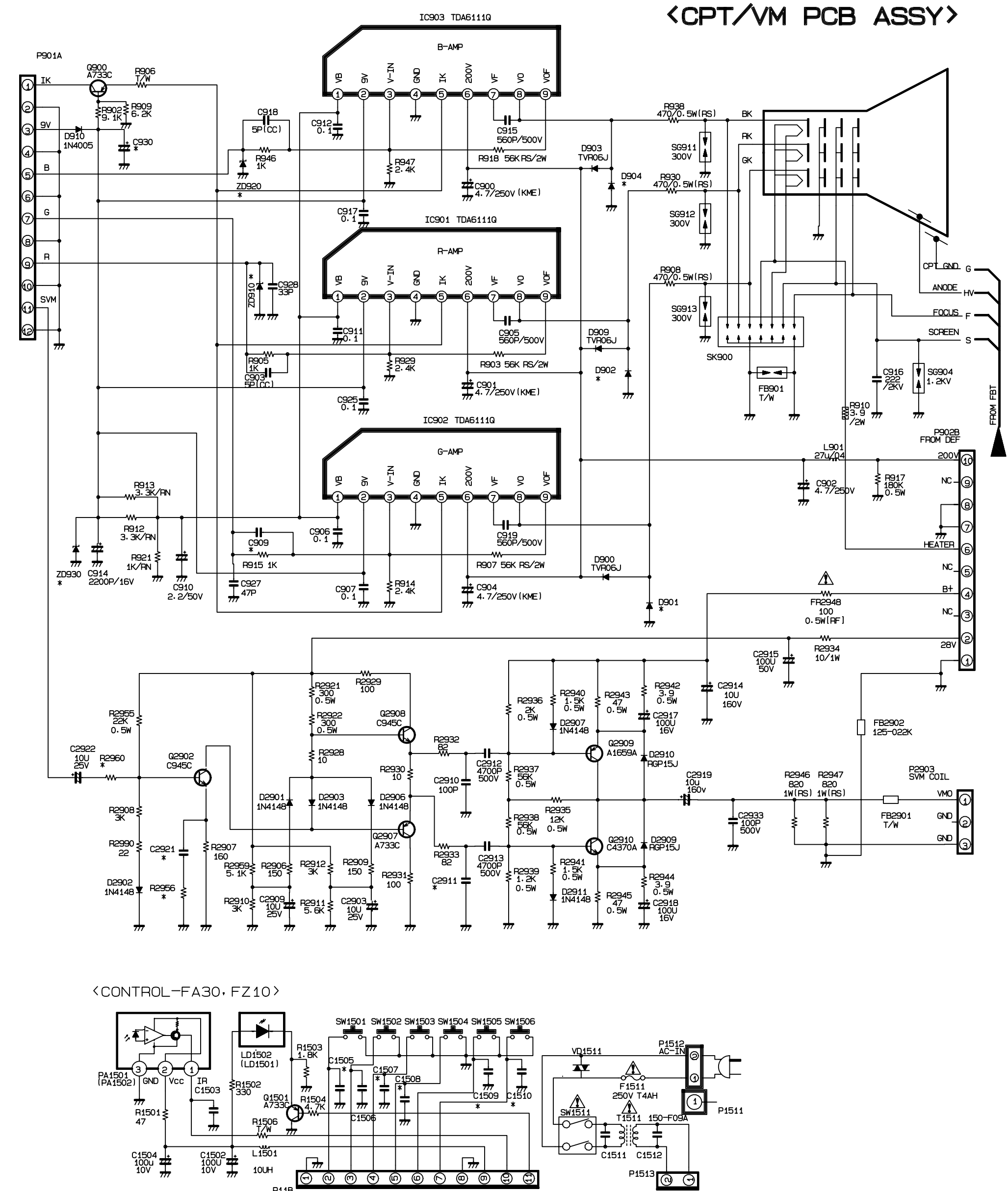
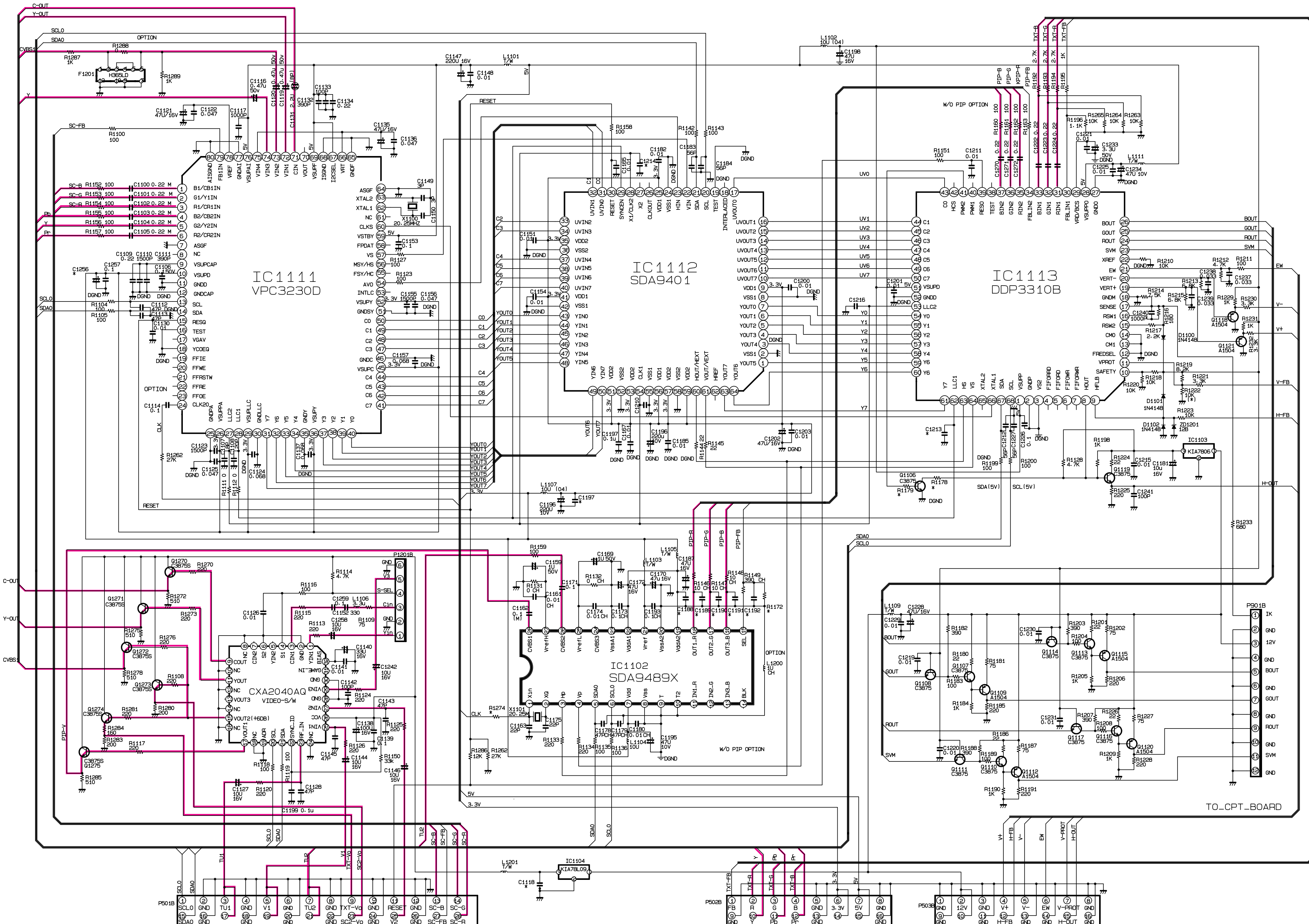
WITH PLATE

VIDEO  
AUDIO

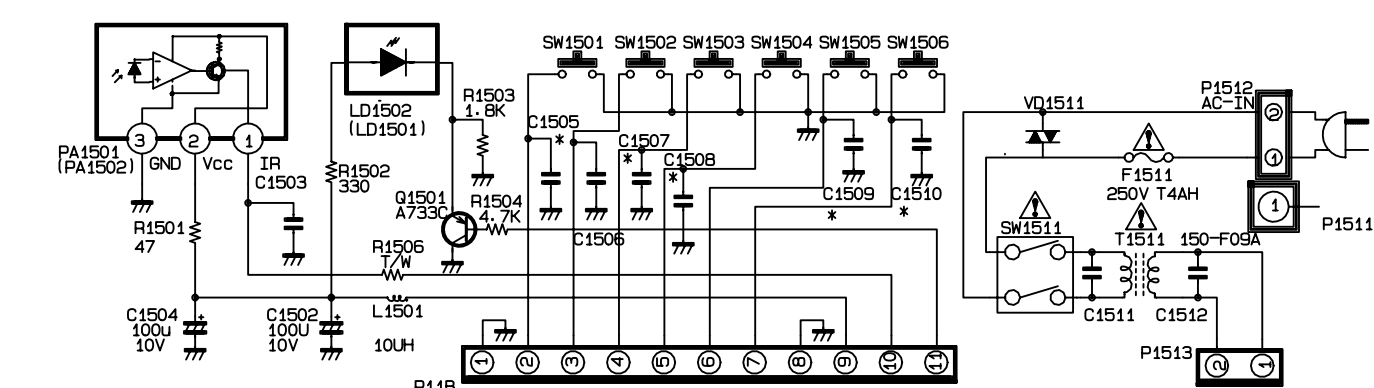
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DATE: 2001.05.17



# Sub 100Hz Board



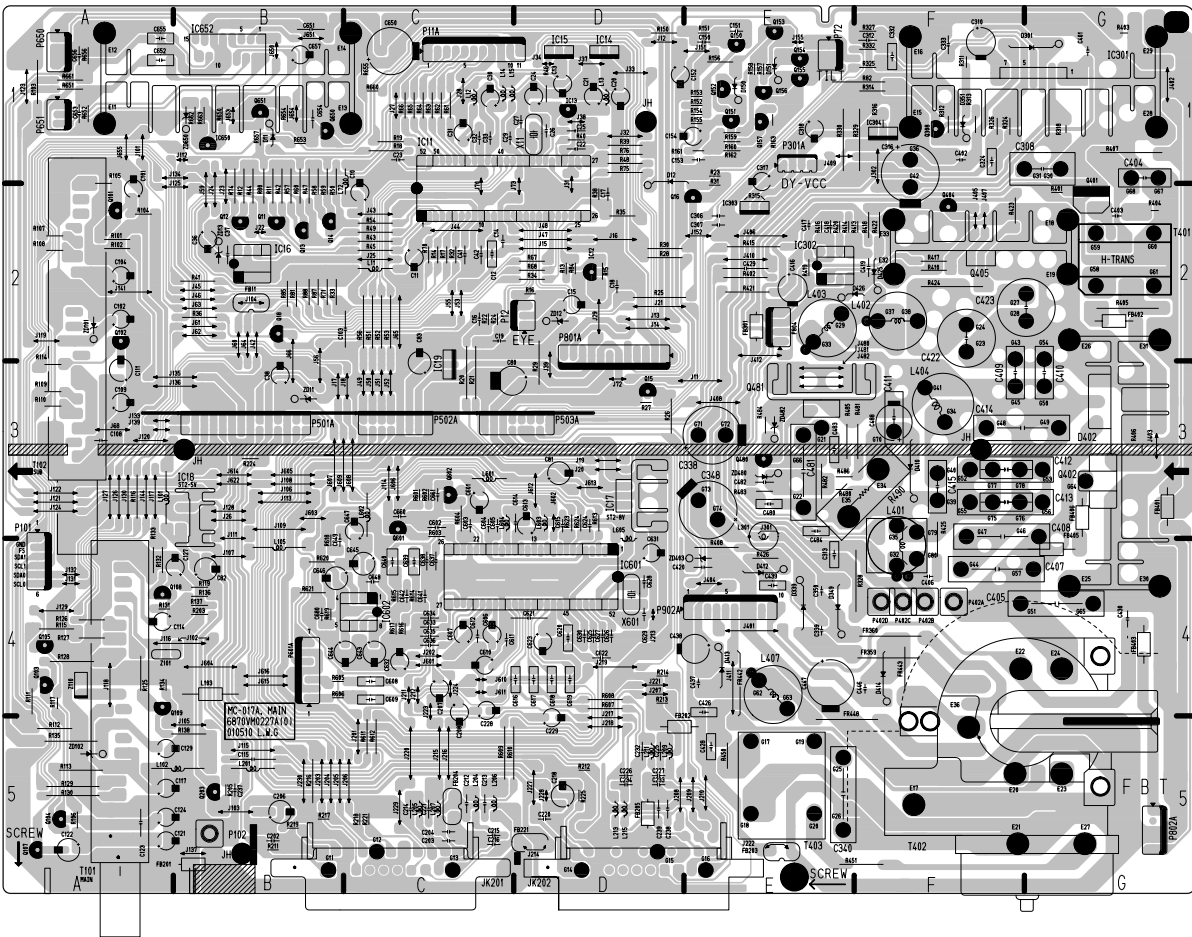
<CONTROL-FA30, FZ10>





# PRINTED CIRCUIT BOARD

## MAIN



# COMPONENT LOCATION GUIDE

C101.....C2	C233.....D5	C615.....D4	FB406.....G4	J72.....D3	J302.....F2	P102.....B5	R35.....D2	R136.....B4	R483.....E3	X11.....D1
C11.....C2	C234.....D5	C616.....D4	FR359.....E4	J73.....D2	J401.....E4	P650.....A1	R36.....B2	R137.....B4	R484.....E3	X601.....D4
C12.....C2	C237.....B5	C617.....D4	FR360.....F4	J101.....A1	J402.....G1	P651.....A1	R38.....D2	R138.....A5	R485.....E3	Z101.....A4
C13.....C1	C238.....D5	C618.....D4	FR442.....E5	J102.....B4	J403.....G3	P804.....E2	R39.....D1	R150.....D1	R486.....E3	Z110.....A4
C14.....C2	C239.....D5	C619.....D4	FR443.....F4	J103.....B5	J404.....E4	P11A.....C1	R40.....D1	R151.....E1	R489.....E3	ZD11.....B3
C15.....D2	C306.....E2	C620.....D4	FR448.....E5	J104.....B2	J405.....F2	P301A.....E1	R41.....B2	R152.....E1	R601.....C3	ZD12.....D2
C16.....C2	C307.....E2	C621.....C4	IC11.....C2	J105.....A5	J406.....E2	P402A.....F4	R42.....B2	R153.....E1	R602.....C3	ZD13.....B2
C17.....D2	C308.....G1	C622.....D4	IC12.....D2	J106.....B3	J407.....F2	P402B.....F4	R43.....C2	R154.....E1	R603.....C4	ZD101.....A2
C18.....D1	C310.....F1	C623.....D4	IC13.....D1	J107.....B4	J408.....E3	P402C.....F4	R44.....B2	R155.....E1	R604.....C4	ZD102.....A5
C19.....C1	C312.....F1	C624.....D4	IC14.....D1	J108.....B3	J409.....E1	P402D.....F4	R45.....C2	R156.....E1	R605.....A4	ZD403.....E4
C20.....D1	C313.....E4	C625.....D4	IC15.....D1	J109.....B3	J410.....E2	P501A.....B3	R46.....D1	R157.....E1	R606.....B4	ZD480.....E3
C21.....D1	C316.....F2	C626.....D4	IC16.....B2	J111.....B4	J411.....E5	P601A.....B4	R47.....B2	R158.....E1	R607.....D4	ZD482.....E3
C22.....D1	C317.....E2	C627.....D4	IC17.....D3	J112.....A1	J412.....E3	P801A.....D3	R48.....D1	R159.....E1	R608.....D4	ZD650.....B1
C23.....C1	C318.....E1	C628.....D4	IC18.....B3	J113.....A3	J413.....E3	P802A.....G5	R49.....C2	R160.....E1	R609.....C5	
C24.....D1	C324.....F2	C629.....D4	IC19.....C3	J114.....C3	J481.....E3	P902A.....E4	R50.....B2	R161.....E1	R610.....D5	
C25.....D1	C332.....F1	C630.....D4	IC301.....G1	J115.....B5	J482.....E3	Q11.....B2	R51.....C3	R162.....E1	R611.....C5	
C26.....D1	C333.....F1	C631.....D4	IC302.....E2	J116.....A4	J601.....C4	Q12.....B2	R52.....C3	R163.....E1	R612.....C5	
C27.....D1	C338.....E3	C632.....C4	IC303.....E2	J117.....A3	J602.....D4	Q13.....B2	R53.....C3	R203.....B4	R613.....D4	
C29.....C1	C339.....E4	C633.....C4	IC304.....F1	J118.....A4	J603.....B3	Q14.....B2	R54.....C2	R205.....B5	R614.....C4	
C30.....C1	C340.....E5	C634.....C4	IC601.....D4	J119.....A2	J604.....B4	Q15.....D3	R56.....C3	R211.....B5	R615.....C4	
C31.....C1	C348.....E3	C635.....C4	IC602.....C4	J120.....A3	J605.....B3	Q16.....E2	R57.....B2	R212.....D5	R616.....C4	
C32.....C1	C350.....E4	C636.....C4	IC650.....B1	J121.....A3	J606.....C3	Q18.....B2	R58.....B2	R213.....D4	R617.....C4	
C33.....C1	C401.....G1	C637.....C4	IC652.....B1	J122.....A3	J607.....B3	Q101.....A2	R59.....B2	R214.....D4	R618.....B4	
C36.....B2	C402.....F1	C638.....C4	J11.....D3	J123.....A1	J608.....C3	Q102.....A2	R60.....B2	R216.....B5	R619.....B4	
C37.....B2	C403.....G2	C639.....C4	J12.....D1	J124.....A3	J609.....C3	Q103.....A4	R61.....C1	R217.....B5	R620.....B4	
C38.....B3	C404.....G2	C640.....C4	J13.....D2	J125.....A2	J610.....C3	Q104.....A4	R62.....C1	R218.....C5	R621.....B4	
C41.....C2	C405.....F4	C641.....C4	J14.....D2	J126.....A3	J611.....C4	Q105.....A4	R63.....C1	R219.....B5	R623.....D4	
C42.....C2	C406.....F4	C642.....C4	J15.....D2	J127.....A3	J612.....D3	Q107.....A5	R64.....C1	R221.....C5	R624.....D4	
C40.....C3	C407.....F4	C643.....C4	J16.....D2	J128.....B3	J613.....D3	Q108.....A4	R65.....C1	R224.....B3	R650.....B1	
C41.....D3	C408.....F4	C644.....C4	J17.....B3	J129.....A4	J614.....B3	Q109.....A4	R66.....C1	R225.....D5	R651.....A1	
C82.....B4	C409.....F3	C645.....C4	J18.....C3	J130.....A3	J615.....B4	Q150.....E1	R67.....D2	R311.....F1	R652.....A1	
C83.....C3	C410.....G3	C646.....B4	J19.....D3	J131.....A4	J616.....B4	Q151.....E1	R68.....D2	R312.....F1	R653.....B1	
C101.....A2	C411.....F3	C647.....C3	J20.....D3	J132.....A4	J622.....B3	Q152.....E1	R70.....C2	R313.....F1	R654.....B1	
C102.....A2	C412.....F3	C648.....C4	J21.....D2	J133.....A3	J650.....B1	Q153.....E1	R71.....B2	R314.....F1	R655.....C1	
C103.....C3	C413.....F3	C649.....B4	J22.....B2	J134.....A2	J651.....B1	Q154.....E1	R74.....B2	R315.....E2	R656.....A1	
C104.....A2	C414.....F3	C650.....C1	J23.....B2	J135.....A3	J653.....B1	Q155.....E1	R75.....D2	R316.....F1	R657.....B1	
C108.....A3	C415.....F3	C651.....B1	J24.....B2	J136.....A3	J654.....B1	Q156.....E1	R76.....D1	R318.....G1	R660.....C1	
C109.....A3	C416.....E2	C652.....A1	J25.....C2	J137.....B5	J654.....A1	Q157.....E1	R80.....B2	R324.....F1	R661.....A1	
C111.....A3	C417.....E2	C653.....A1	J26.....B3	J139.....A3	JK201.....C5	Q203.....B5	R81.....B2	R325.....F1	R662.....B1	
C114.....A4	C418.....E2	C654.....B1	J27.....C1	J141.....A2	JK202.....D5	Q308.....F1	R82.....E1	R326.....F1	R663.....B1	
C115.....B5	C419.....F2	C655.....A1	J28.....C1	J144.....A3	L11.....C2	Q401.....G2	R84.....D2	R327.....F1	T101.....A5	
C117.....B5	C420.....E4	C656.....A1	J29.....D2	J151.....D1	L12.....C1	Q404.....F2	R85.....B2	R328.....F4	T101.....G2	
C121.....B5	C422.....F3	C657.....B1	J31.....D2	J152.....D2	L13.....D1	Q405.....F2	R87.....B2	R329.....E2	T401.....G2	
C122.....A5	C423.....G2	C660.....C3	J32.....D1	J155.....E1	L14.....C1	Q480.....E3	R88.....B2	R330.....E2	T402.....F5	
C123.....A5	C428.....E4	E4.....C1	J33.....D1	J201.....C5	L15.....C1	Q481.....E3	R101.....A2	R332.....F1	T403.....E5	
C124.....B5	C429.....E4	C661.....B3	J34.....D1	J202.....C4	L72.....C2	Q601.....C3	R102.....A2	R401.....G2	TP1.....A1	
C127.....B4	C429.....E2	D11.....B1	J37.....D1	J203.....B5	L101.....A3	Q602.....C3	R103.....A1	R402.....E2	TP2.....A3	
C129.....B5	C430.....G4	D12.....D2	J38.....D1	J204.....B5	L102.....A5	Q650.....B1	R104.....A2	R403.....G1	TP3.....A2	
C150.....E1	C437.....E4	D150.....E1	J39.....D3	J205.....B5	L103.....B4	Q651.....B1	R105.....A2	R404.....G2	TP4.....A2	
C151.....E1	C438.....E4	D151.....B1	J40.....C2	J206.....C5	L105.....B4	R11.....B2	R106.....A5	R405.....G2	TP5.....A2	
C152.....D1	C439.....E4	D301.....G1	J43.....C2	J207.....D4	L201.....B5	R12.....B2	R107.....A2	R406.....G3	TP6.....A3	
C153.....E1	C446.....F4	D339.....E4	J44.....C2	J208.....D5	L204.....C5	R13.....D2	R108.....A2	R407.....G1	TP7.....A2	
C154.....E1	C447.....E4	D349.....E4	J45.....B2	J209.....E5	L205.....C5	R14.....C2	R109.....A3	R408.....E4	TP8.....A2	
C202.....B5	C480.....E3	D351.....F1	J46.....B2	J210.....E5	L206.....C5	R15.....D2	R110.....A3	R409.....F2	TP9.....A5	
C203.....C5	C481.....E3	D402.....G3	J47.....D2	J211.....C4	L207.....C5	R16.....C2	R111.....A5	R413.....F2	TP10.....A3	
C204.....C5	C482.....E3	D410.....F3	J48.....D2	J212.....C4	L209.....D5	R17.....C2	R112.....A5	R414.....E2	TP11.....A4	
C206.....B5	C483.....E3	D412.....E4	J49.....C3	J213.....D4	L211.....D5	R18.....C1	R113.....A5	R415.....E2	TP12.....C4	
C207.....C4	C484.....E3	D413.....C2	J50.....D5	J214.....D4	L213.....C4	R19.....C1	R114.....A5	R416.....E2	TP13.....C4	
C208.....C5	C488.....F3	D414.....F4	J51.....C3	J215.....C5	L215.....D5	R20.....C2	R115.....A4	R417.....F2	TP14.....C4	
C212.....C5	C601.....C3	D425.....F2	J52.....C3	J216.....C5	L301.....E4	R21.....C2	R116.....A3	R418.....F2	TP15.....D4	
C213.....C5	C602.....C3	D426.....E2	J53.....C2	J217.....D5	L401.....F4	R22.....C2	R117.....A5	R419.....E2	TP16.....D4	
C214.....C5	C603.....C4	FB11.....B3	J54.....C2	J218.....D5	L402.....F2	R23.....E2	R118.....B4	R420.....E5	TP17.....D4	
C215.....C5	C604.....C4	FB201.....B5	J56.....B3	J219.....D4	L403.....E2	R24.....C2	R119.....A4	R421.....E2	TP18.....D4	
C216.....C5	C605.....C4	FB202.....D5	J59.....B2	J220.....C5	L404.....F3	R25.....D2	R126.....A4	R422.....F2	TP19.....D4	
C218.....D5	C606.....C4	FB203.....E5	J60.....B3	J221.....D4	L407.....E4	R26.....D3	R127.....A4	R423.....F2	TP20.....D4	
C220.....D5	C607.....C4	FB204.....C5	J61.....C2	J222.....E5	L602.....C2	R27.....D3	R128.....A4	R424.....F2	TP21.....D4	
C221.....C5	C608.....C4	FB205.....D5	J62.....B2	J223.....C5	L603.....D4	R28.....D2	R129.....A5	R425.....F4	TP22.....D1	
C225.....D5	C609.....C4	FB221.....E5	J63.....B2J	J224.....C4	L603.....D4	R29.....D3	R130.....A5	R426.....F4	TP23.....D4	
C226.....D5	C610.....C4	FB301.....E2	J64.....B3	J227.....D5	L604.....C4	R30.....D2	R131.....A4	R450.....E5	TP24.....D4	
C227.....C5	C611.....C4	FB401.....C3	J65.....C3	J228.....D5	L605.....D2	R31.....E2	R132.....A4	R480.....E5	TP25.....D4	
C228.....C4	C612.....C4	FB402.....G2	J66.....B3	J229.....C5	P12.....D2	R32.....E2	R133.....A4	R481.....F2	TP26.....E4	
C229.....D5	C613.....D3	FB403.....G4	J68.....A3	J230.....B5	P12.....A1	R33.....D2	R134.....A4	R481.....F3	TP27.....E4	
C232.....D5	C614.....D4	FB404.....G4	J70.....C2	J301.....E4	P701.....E1	R34.....D2	R135.....A5	R482.....E3	TP28.....E4	

**SVC. SHEET : 3854VA0086A-S1**  
**3854VA0086A-S2**